





CAREER FIELD
EDUCATION AND TRAINING PLAN
(CFETP)

DEPARTMENT OF THE AIR FORCE Headquarters US Air Force Washington DC 20330-1030

MISSILE AND SPACE SYSTEMS MAINTENANCE SPECIALTY

AFSC 2M0X2 CAREER FIELD EDUCATION TRAINING PLAN

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PREFACE

- 1. A highly trained, motivated enlisted workforce is the Air Force's key resource in meeting challenges of the future. If the Air Force is to meet present and future challenges, it's essential the workforce be effectively and efficiently trained to perform duties within each skill level of the Air Force Specialty (AFS). The Career Field Education Training Plan (CFETP) for the Missile and Space Systems Maintenance specialty provides the framework and guidance necessary for planning, developing, managing, and conducting a career field training program. The plan documents a "training roadmap" for the career field. This roadmap is used to identify mandatory and optional skill level training an individual should receive during their career in the Missile and Space Systems Maintenance Specialty.
- 2. The CFETP consists of two parts used to plan, manage, and control training within the 2M0X2 career field.
- 2.1. Part I provides information necessary for overall management of training in the career field. **Section A** explains how everyone will use the plan; **Section B** identifies career progression information, duties and responsibilities, training strategies, and career field flowcharts; **Section C** associates each skill level with specialty qualifications (knowledge, training, education, experience, and other); **Section D** identifies training resource constraints. Some examples are: funds, manpower, equipment, and facilities.
- 2.2. Part II includes the following: <u>Section A</u> identifies the Specialty Training Standard (STS)/Course Training Standard (CTS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) training conducted, wartime course/core task and correspondence course requirements; <u>Section B</u> identifies the Course Objective list; <u>Section C</u> identifies available OJT support materials. Qualification training packages identified in this section have been developed to support both upgrade and qualification training. These packages are available through the AF Pubs webpage, www.afpubs.hq.af.mil/pubs/; <u>Section D</u> contains a training course index supervisors can use to determine resources available to support both mandatory and optional training. <u>Section E</u> can be used to identify Major Command (MAJCOM) unique training requirements. At unit level, supervisors and trainers use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.
- 3. Use of this CFETP will ensure each individual in the Missile and Space Systems Maintenance specialty will receive effective and efficient training at the appropriate point in his/her career. This plan will enable the Air Force to train today's workforce for tomorrow's mission.

Abbreviations/Terms Explained

Advanced Training - A formal course that provides individuals who are already fully qualified in their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of an AFS.

Career Development Course (CDC) - A formal written course, which provides personnel with additional knowledge necessary to advance to the next higher skill level.

Career Field Education Training Plan (CFETP) - A multipurpose document that encapsulates the entire spectrum of training for a career field or specialty. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, eliminate duplication, and is budget defensible.

Continuation Training - Additional qualification training exceeding the minimum upgrade training requirements with emphasis on present or future duty assignments.

Core Task - Tasks the AFCFM identify as minimum qualification requirements within an AFSC, regardless of duty position. Core tasks may be specified for a particular skill level or in general across the AFSC. Guidance for using core tasks can be found in the applicable CFETP narrative

Critical Task - Tasks identified by the MAJCOM functional manager or local unit supervisors as additional qualification requirements within a specialty or duty position for assigned personnel.

Cruise missile (CM) - Personnel in AFSC 2M0XX and 2M0X1B associated with Air Launched Cruise missile (ALCM), Advanced Cruise missile (ACM) and Conventional Air Launched Cruise missile (CALCM) programs. These personnel are normally associated with Air Combat Command, but may be assigned in Air Force Material Command positions.

Field Technical Training (Type 4) - Special or regular on-site training conducted by a field training detachment (FTD) or by a mobile training team (MTT).

Initial Skills Training (Type 3) - A formal resident course that results in award of the 3-skill level.

Intercontinental Ballistic Missile (ICBM) - Personnel in AFSC 2M0XX associated with Minuteman III and Peacekeeper weapon systems. These personnel are normally associated with Air Force Space Command, but may be assigned in Air Force Material Command positions.

Mechanical Shop (MECH) - 2M0X2s performing in-shop maintenance on weapons system components and support equipment at ICBM units.

Missile Handling Team (MHT) - A team of 2M0X2 personnel responsible for removal, emplacement, storage, and transportation of ICBM missiles.

Missile Maintenance Team (MMT) - A team of 2M0X2 personnel who dispatch to remote launch facilities to perform maintenance on the missile, missile guidance set, reentry system, and other selected weapon system subsystems.

Occupational Survey Report (OSR) - A detailed report showing the results of an occupational survey of tasks performed within a particular AFS.

On-the-Job Training (OJT) - A method used to certify personnel in both upgrade (skill level award) and qualification (duty position certification) training. OJT is hands-on, over-the-shoulder training conducted at the duty station.

Pneudraulics Shop (PNEU) - 2M0X2 personnel performing maintenance on pneudraulic and hydraulic systems associated with the ICBM weapon system.

Qualification Training (QT) - Actual hands-on task performance-based training designed to qualify an airman in a specific duty position or specific task. This training occurs both during and after the upgrade training process and is designed to provide performance skills training required to do the job.

Research and Development (R&D) - Personnel in AFSC 2M0XX associated with research, development, acquisition, and support of missiles, spacelift, lasers, weapons, drones, etc. These personnel are normally associated with Air Force Material Command.

Resource Constraints - Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude training from being delivered.

Spacelift - Personnel in AFSC 2M0XX associated with national space programs supporting the launch and recovery of space assets. These personnel are normally associated with Air Force Space Command.

Specialty Training Standard (STS) - Part II, Section A of the CFETP which identifies the training standard required to achieve a skill level(s) within an enlisted AFS. It standardizes and controls the quality of individual training.

Standard - A fixed quantity, quality, or level of performance that an individual is expected to demonstrate.

Upgrade Training (UGT) - Mandatory training that leads to the award of a higher skill level.

PART I Section A - GENERAL INFORMATION

- 1. **Purpose of the CFETP**. This CFETP provides information that career field functional managers, training managers, commanders, supervisors, trainers, and the technical training center use to plan, develop, manage and conduct an effective and efficient career field training program. The plan outlines training individuals must receive to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, advanced, and continuation training. This plan does not address Professional Military Education (PME) or ancillary training. The CFETP has several purposes:
- 1.1. Serves as a management tool to plan, develop, manage, and conduct a career field training program. It is also used to ensure that established training is provided at the appropriate point in an individual's career.
- 1.2. Identifies task and knowledge requirements for each skill level in the specialty and recommends training throughout each phase of an individual's career.
- 1.3. Lists training courses available in the specialty, identifies sources of training, and provides the training medium.
- 1.4. Identifies major resource constraints that impact implementation of the desired career field training program.
- 2. **Use of the CFETP**. The CFETP will be approved and maintained by the Air Force Career Field Manager (AFCFM). The MAJCOM 2M0XX Functional Manager and AETC will review the CFETP annually to ensure currency and accuracy and forward recommended changes to the AFCFM. MAJCOMs must make sure additional training isn't developed that can be satisfied by existing courses. This plan will be used at all levels to ensure a comprehensive and cohesive training program is available and instituted for each individual in the career ladder.
- 2.1. AETC training personnel will develop/revise formal resident and exportable training based upon requirements established by the users and documented in part II of the CFETP. They will also develop procurement and acquisition strategies for obtaining resources needed to provide the identified training. In addition, the AETC training manager will prepare a camera ready CFETP and send to SAF/AAIPD for publication. The training manager is also responsible for updates and publication of all changes. A Utilization and Training Workshop (U&TW) will be conducted as needed and hosted by the training manager. The AFCFM will chair the U&TW.

- 2.2. The MAJCOM functional managers will ensure their training programs complement the CFETP mandatory initial skills and UGT requirements. OJT, resident training, contract training, or exportable courseware/courses can satisfy identified requirements. MAJCOM-developed training must be identified for inclusion in this plan and must not duplicate available training.
- 2.3. Each individual will complete the mandatory training requirements specified in this plan. Unit level training managers and supervisors will manage and control progression through the career field by ensuring that each individual completes the mandatory training requirements for upgrade specified in this plan as supplemented by their MAJCOM. The list of courses in Part II, Sec. C, will be used, as a reference to determine training required.

PART I Section B - CAREER PROGRESSION AND INFORMATION

1. **Purpose**. This section provides information career field functional managers, training managers, commanders, supervisors, trainers, and the technical training center use to plan career field progression in the Missile and Space Systems Maintenance specialty. This plan describes the functions and responsibilities of AFSC 2M0X2, skill progression, training decisions, and outlines Community College of the Air Force educational opportunities.

2. Specialty Descriptions:

- 2.1. Missile and Space Systems Maintenance Apprentice and Journeyman (2M032/52).
- 2.1.1. Assembles, fabricates, installs, troubleshoots, tests, operates, repairs, maintains, modifies, configures, inspects, services, or directs and controls these actions on missiles, boosters, payloads, R&D systems, environmental blast doors and valves, subsystems, components and support equipment.
- 2.1.2. Duties and Responsibilities.
- 2.1.2.1 Performs associated missile maintenance actions at the flightline, railhead, support base, launch facility, missile alert facility, test facilities, and storage facilities. Inspects, prepares, loads, unloads, hoists, services, troubleshoots, handles, repairs, checks, removes, replaces and adjusts components and subcomponents. Mechanically/electrically connect/disconnect: re-entry systems, guidance and control sections, missile stages, propulsion systems and secondary ordnance devices at the launch facility. Prepares missile and launch facility for simulated launch and follow-on test and evaluation. Performs preventative maintenance inspections and electrical tests on missile, missile components, launch facility, missile alert facility, support vehicles, hydraulic, and pneumatic systems, and equipment.

Operates special purpose vehicles, support equipment and configures vehicles with support equipment. Determines depth of malfunctions. Uses technical publications, mechanical drawings and consults with engineers. Maintains technical orders and publication files.

- 2.1.2.2. Directs and controls the transportation, assembly, and inspection of booster and payloads functions. Directs and controls the following actions: loading, transportation, unloading, hoisting, and erection to place boosters and satellites into operation or maintenance positions; preparation of space launch complexes; receipt, inspection and assembly of boosters, payloads, component parts, and subsystems; erection and mating of booster sections and payloads; servicing, inspection, repair, maintenance, checkout, testing, and operation of associated support equipment. Performs or directs the performance of preventive maintenance inspections. Assists in evaluation of malfunctions by using technical publications, mechanical drawings, or engineering instructions. Practices and supervises safety procedures to be followed in the handling of nitrogen, liquid fuels, oxidizers, and ordnance devices.
- 2.1.2.3. Assesses quality of personnel and equipment. Inspects personnel performance, equipment, and management functions for compliance with technical data and governing directives. Submits reports to management on all quality assessment findings.
- 2.1.2.4. *Conducts maintenance and operations training*. Conducts training of personnel prior to being task certified. Conducts recurring training to assure task proficiency.
- 2.1.2.5. Performs Laboratory R&D activities. Fabricates, assembles, installs, inspects, operates, tests, and troubleshoots specialized R&D systems such as: laser, energetic materials, solid/liquid propulsion, composites, optical, satellite, space structures and power, telescope pointing and tracking, and high power microwave. Operates, maintains, and assists in resolving problems associated with support equipment such as: data acquisition, fiber optic, instrumentation, vacuum system, wind tunnel, test stands, high/low pressure gas, propellant mixing/molding, and exotic fuels storage systems. Supports and advises scientists and engineers during experiment design, setup, and execution.
- 2.1.2.6 *Performs inspections to comply with international treaties*. Performs inspections to comply with international treaties relating to nuclear weapons and associated equipment.
- 2.1.2.7. *Performs duty as an NCO code controller*. Selects and produces ICBM code material utilizing computerized coding equipment. Safeguards, assigns, issues, and recovers critical code material. Maintains equipment and keeps records for control and accountability of ICBM codes and coded devices. Performs duty as a member of a two-person code controller team.

- 2.2. Missile and Space Systems Maintenance Craftsman (2M072).
- 2.2.1. Supervises the installation, testing, troubleshooting, fabrication, operation, assembly, repair, maintenance, modification, configuration, inspection, transportation, and servicing of missiles, spacelift boosters, payloads, R&D systems, environmental defense blast doors and valves, subsystems, components and support equipment. Directs compliance of technical, procedural, safety, security, and quality assurance standards. Determines anomaly resolution. Designs R&D systems. Performs acquisition and activation functions for related systems.

2.2.2. Duties and Responsibilities.

- 2.2.2.1. Perform, advise, supervise and manage resources dealing with associated missile maintenance actions at the flightline, railhead, support base, launch facility, missile alert facility, test and storage facilities. Supervises the inspection, preparation, loading, unloading, hoisting, servicing, troubleshooting, handling, repair, checkout, removal, replacement, and adjustment of components and subcomponents. Verifies mechanical/electrical connection/disconnection of: re-entry systems, guidance and control sections, missile stages, propulsion systems and secondary ordnance devices at the launch facility. Directs the preparation of missile and launch facility for simulated launch and follow-on test and evaluation. Performs preventative maintenance inspections and electrical tests on missile, missile components, launch facility, missile alert facility, support vehicles, hydraulic, pneudraulic, and pneumatic systems, and equipment. Operates special purpose vehicles and support equipment. Evaluates inspection results, and makes decisions regarding component replacement or repair. Diagnoses' recurring malfunctions, and recommends corrective action. Initiates unsatisfactory reports, failure reports, or proposed modifications. Supervises the maintenance of technical orders, and publication files. Interfaces with contractors on design of improved weapon systems, support vehicles, and equipment.
- 2.2.2.2. Advises on problems related to configuration, checkout, transport, assembly, installation, and inspection of boosters, and payloads, their subsystems, and support equipment. Solves problems in transporting and assembling boosters, and payloads at spacelift facilities. Supervises the following actions: preparation of the space launch complexes for receipt, inspection and assembly of boosters, payloads, component parts, and subsystems; erection and mating of booster sections and payloads. Performs or directs the performance of preventive maintenance inspections. Evaluates inspection results, and makes decisions regarding component replacement or repair, and repair procedures. Diagnoses' recurring malfunctions, and recommends corrective action. Initiates unsatisfactory reports, failure reports, or proposed modifications. Supervises the servicing, inspection, repair, maintenance, checkout, testing, and operation of support equipment. Evaluates malfunctions using technical publications, mechanical drawings, or engineering instructions and recommends corrective action. Determines proper operation of mechanical consoles and panels. Practices and supervises safety procedures to be followed in the handling of chemicals, propellants, and ordnance devices.

- 2.2.2.3. Assesses quality of personnel and equipment. Inspects personnel performance, equipment, and management functions for compliance with technical data, governing directives. Submits reports to management on all quality assessment findings.
- 2.2.2.4. *Conducts maintenance and operations training*. Conducts training of personnel prior to being task certified. Conducts recurring training to assure task proficiency.
- 2.2.2.5. Evaluate and performs Laboratory R&D activities. Designs, fabricates, assembles, installs, inspects, operates, tests, troubleshoots and modifies specialized R&D systems such as: laser, energetic materials, solid/liquid propulsion, composites, optical, satellite, space structures and power, telescope, pointing and tracking, and high power microwave. Designs, maintains, modifies, and resolves problems associated with support equipment such as: data acquisition, fiber optic, instrumentation, vacuum systems, wind tunnel, test stands, high/low pressure gas, propellant mixing/molding and exotic fuel storage systems. Supports and advises scientists and engineers during experiment design, setup, and execution. Determines budget, schedule, and technical performance requirements on projects.
- 2.2.2.6. Supervises the performance of inspections to comply with international treaties. Supervises inspections to comply with international treaties relating to nuclear weapons and associated equipment.
- 2.2.2.7. *Performs duty as an NCO code controller*. Selects and produces ICBM code material utilizing computerized coding equipment. Safeguards, assigns, issues, and recovers critical code material. Maintains equipment and keeps records for control and accountability of ICBM codes and coded devices. Performs duty as a member of a two-person code controller team.
- 2.3. Missile and Space Systems Superintendent/Chief Enlisted Manager (2M090/00).
- 2.3.1. Specialty Summary. Superintends maintenance, processing, acquisition, and operation of missiles, spacelift boosters, payloads, and associated subsystems, facilities, support and test equipment. Superintends the activities associated with specialized R&D systems. Superintends maintenance activities engaged in on- and off-equipment maintenance of strategic bomber-launched missiles, aircraft missile and bomb rotary launchers, aircraft stores management systems, and associated test equipment.
- 2.3.2. Duties and Responsibilities.
- 2.3.2.1. Plans and organizes missile, spacelift booster, payload, air launched missile and R&D maintenance and processing activities. Manages processing activities. Develops organizational structure to establish lines of authority, and assigns specific responsibilities.

Determines materiel and personnel requirements for current and projected commitments. Establishes work procedures for effective personnel use and increased efficiency and accuracy of operation. Analyzes inspection and test reports, and recommends product improvement. Requisitions and accounts for equipment, facilities, special tools, and supplies. Coordinates missile, booster, and payload maintenance and launch processing activities with base organizations. Manages acquisition and activation activities. Monitors engineers and technicians during R&D experiments for procedural compliance. Superintends ICBM coding operations and activities at missile alert facilities.

- 2.3.2.2. Directs missile maintenance, booster and payload launch processing, air launched missile, and R&D activities. Controls work-flow, assigns special projects, and monitors program and special project progress. Monitors unit and individual productivity and work quality. Evaluates unit performance in terms of compliance with policies, directives, technical publications, and hazardous materials operations. Ensures conformance with prescribed efficiency, quality, and training standards. Supervises preparing and maintaining records and reports. Explains maintenance, operations, inspection, test, repair, and launch processing policies, procedures, and technical directives. Advises supervisors of missile, and spacelift systems, facilities, and personnel capabilities to meet requirements.
- 2.3.2.3. Inspects missile, , booster, payload, air launched missile, and R&D maintenance and processing functions. Inspects and evaluates missile maintenance activities. Inspects and evaluates booster and payload maintenance and processing activities. Interprets efficiency and equipment reliability findings and recommends improvements. Reviews maintenance and processing data to evaluate programs and project requirements and capabilities. Analyzes unit records and reports for correcting or improving recurring malfunctions in missile, booster, and payload systems, subsystems, components, and related equipment. Coordinates inspection findings with other support agencies.
- 2.3.2.4. *Instructs maintenance, operations and R&D functions*. Oversees the management and the integration of all training activities. Interprets and determines essential training requirements. Coordinates unit training requirements with all activities. Evaluates unit's training in terms of compliance with policies, directives and technical publications.
- 2.3.2.5. Supervises the performance of inspections to comply with international treaties. Supervises inspections to comply with international treaties relating to nuclear weapons and associated equipment.
- 3. **Skill/Career Progression.** Quality training and timely progression from the apprentice to the superintendent skill level play an extremely important role in the Air Force's ability to accomplish its mission. Therefore, it is essential everyone involved in training do their part to plan, develop, manage, conduct, and evaluate an effective and efficient training program. The

guidance provided in this part of the CFETP will ensure individuals receive viable training at appropriate points in their career. The following narrative and the AFSC 2M0X2 career field flowcharts identify the training career path and define training required.

- 3.1. Apprentice (3-skill level) Training. Initial skills training in this specialty consists of tasks and knowledge training provided in Missile and Space Systems Maintenance Apprentice Course. Individuals must successfully complete these initial skills training course to be awarded the 3-skill level.
- 3.2. Journeyman (5-skill level) Training. Upgrade training to the 5-skill level in the Missile and Space Systems Maintenance specialty consists of: (1) all personnel must complete the mandatory requirements identified in AFI 36-2108, (2) all personnel must complete the knowledge training provided in the 2M052 CDC, and (3) personnel must obtain qualification on applicable weapon system and duty section (MMT or MHT) 5-level core tasks identified in Part II, Section A2, Attachments 2 or 3 of this plan. After award of the 5-skill level, continuation training, when available, should be utilized based on an individual's particular duty position or other needs. Continuation training is listed in, but not limited to that described in Part II, Section C, of this plan.
- 3.3. Craftsman (7-skill level) Training. Upgrade training to the 7-skill level in the Missile and Space Systems Maintenance specialty consists of: (1) all personnel must complete the mandatory requirements identified in AFI 36-2108, (2) all personnel must complete the knowledge training provided in the 2M072 CDC, and (3) personnel must obtain qualification on 7-level core tasks identified in Part II, Section A2, Attachment I, Common Missile and Space Maintenance Tasks. After award of the 7-skill level, continuation training, when available, should be utilized based on an individual's particular training needs. Continuation training is listed in, but not limited to that described in Part II, Section C, of this plan.
- 3.4. Superintendent (9-skill level) Training. Upgrade to the 9-skill level as a Missile and Space Systems Superintendent is accomplished at SMSgt sew-on date as long as requirements identified in AFMAN 36-2108 have been met. No additional requirements were identified for upgrade to AFSC 2M090. Continuation training, if available, should be utilized based on an individual's particular needs.
- 4. **Training Decisions**. The CFETP was developed to encapsulate an entire spectrum of training requirements for the Missile and Space Systems Electronics specialty using a building block approach (simple to complex). Included in the spectrum was the strategy of when, where, and how to meet the training requirements. The strategy must be apparent and affordable to make it easier to comply with and reduce duplication of training. The following paragraphs list the historical training decisions we've made. These paragraphs are not directive in nature. They are listed to provide continuity for future career field management. The paragraphs are in chronological order. Subsequent meetings may have reversed decisions made at earlier meetings.

- 4.1. 2M0XX U&TW 20 30 Sep 93.
- 4.1.1. Initial skills. The STS was rewritten to include tasks that were previously not identified prior to the AFSC mergers effective October 1993 and April 1994. All initial skills tasks were reviewed to include these functions.
- 4.1.2. Upgrade training. In addition to Year of Training initiatives, the following decisions were made regarding AFSC 2M0X1:
- 4.1.2.1. 5 level upgrade All tech school graduates will be assigned to an operational missile (ICBM or Cruise missile) unit to complete 5-level core task training requirements. Core tasks for upgrade to the 5-skill level will consist of Electro-Mechanical Team (EMT) at ICBM units and Missile Maintenance Section tasks at Cruise missile units. ELAB and VACE tasks were discussed and a decision was reached to exclude them from the core task listing, placing the focus of five level training on field dispatching (ICBM) or in-shop air vehicle maintenance (cruise missiles). Training in these workcenters builds a foundation for subsequent progression into all other areas of the 2M0X1 career field. All applicable 5-level core task training must be completed prior to reassignment to a unit that does not possess 5-level core task training capability.
- 4.1.2.2. 7 level upgrade Core tasks for upgrade to 7-level must be accomplished at an ICBM or Cruise missile unit. Personnel assigned to ICBM units will complete all required core tasks in Electro-mechanical team (EMT) or Electronics Laboratory (ELAB) for the assigned weapon system. Individuals assigned to missile units with multiple weapon systems (including Vandenberg AFB) are required to complete core task training for one of the assigned weapon systems. In this case, local training managers will select the appropriate weapon system to satisfy upgrade requirements. Personnel assigned to Cruise missile units will complete all required core tasks in either Missile Checkout or Verification and Checkout Equipment (VACE).
- 4.1.2.3. Personnel who were awarded the 5-skill level or 7-skill level prior to implementation of the Year of Training (YOT) initiatives **are not** required to complete core tasks for that awarded skill level unless required for current duty position. Individuals are highly encouraged to complete these core tasks, if possible. Personnel upgrading after the implementation of YOT initiatives must complete all upgrade training requirements, including core tasks. This decision was based on the overwhelming training burden that would result if personnel previously awarded 5-and 7-skill levels were required to return to training. Additionally, many personnel are located at units which could not comply with current core tasks identified by this U&TW.

- 4.2. 2M0XX U&TW 31 Jul 4 Aug 95 & ICBM Training Conference 21 22 Feb 96. Mission Ready Technician (MRT) Program: After the 2M0XX U&TW met 31 Jul 4 Aug 95, the 2M0XX community was directed to incorporate the MRT concept in its 3-level technical training. The Air Force MRT Program is designed to shift the training burden from the operational units to the technical school by producing certified 3-level apprentice personnel directly from technical school. Upon arrival at their first duty station, a mission ready trained apprentice may be utilized on those 3-level tasks certified at the technical school in minimum time. An ICBM MRT conference was held with representatives from all units to identify MRT 3-level tasks to be trained and certified by the technical school. Certification of these 3-level tasks by technical school instructors resulted in a significant increase in training days to the original U&TW. This and the MRT concept drove the group to reevaluate the STS requirements identified at the previous U&TW resulting in changes to the STS. All subjects and tasks were still covered; however, some were deleted from the basic course if they could be covered in the CDC.
- 4.3. 2M0XX Training Conference 23 26 Mar 98. Mission Ready Technician (MRT) Program: After the Feb 98 AETC Trained Personnel Requirements (TPR) conference, a decision was made to revise the 2M0X1 Specialty Training Standards (STS). The existing MRT training courses cannot produce a sufficient amount of graduates to sustain the career field. Air Force Space Command (AFSPC) redefined MRT training requirements.
- 4.4. 2M0XX Training Conference 23 25 Feb 99. Mission Ready Technician (MRT) will now be identified as a Mission Ready Airman (MRA). All 2M0XX specialty and course training standards were reviewed and revised. Seven -level in residence courses will be discontinued at Vandenberg AFB effective Mar 99. Space Launch Maintenance Training Course will be discontinued at Vandenberg AFB effective Sep 99.
- 4.5. 2M0XX Training Conference 16 17 Aug 99. Career Field Manager directed a review of the 2M0XX technical training courses. The Technical Engineering B/CDB course will be discontinued in residence at Vandenberg AFB effective Sep 00. The Wing VI information will be converted to Wing IX, enhanced and moved to the AM/CDB course effective Oct 00. Career Development Courses (CDCs) were reviewed in-depth. A new Electronic Principles (EP) STS is scheduled to be implemented Oct 00. 20 AF will create a course for new shop chiefs incorporating the 532d Training Squadron's discontinued 7-level course material.
- 4.6. 2M0XX Pre U&TW 15 16 May 01. A pre U&TW meeting was held at the 532nd TRS in May 01. Purpose was to provide familiarization of the U&TW process to the AFSC and to identify proposed changes to the 2M0XX AFSC awarding courses, CFETPs and CDCs. We also revised the 5- and 7-level upgrade requirements to address problems for 2M0XX personnel assigned to Spacelift and R&D positions.

- 4.7. 2M0XX U&TW 10 12 Dec 01. Each of the 2M0XX AFSCs met and made changes to core tasks, Specialty Training Standards and general CFETP verbiage. In addition, the 2M0X1B AFSC added material to the Career Development Course. Extensive minutes have been compiled detailing the changes made by each AFSC --- the Training Managers and Career Field Managers have copies of these Minutes.
- 4.7.1. A major topic of this U&TW was upgrade training. We decided to provide 5-level core tasks in limited areas. For cruise missiles, 5-level core tasks are limited to Missile Checkout section. For ICBMs, 2M0X1 5-level core tasks are limited to Electro-mechanical section, 2M0X2 5-level core tasks can be obtained in either Missile Mechanical section or Missile Handling section, 2M0X3 5-level core tasks can be obtained in either Facilities Maintenance Team section or Periodic Maintenance Teams section. 7-level core tasks have been changed to non-technical tasks, which can be found in Attachment 1. These decisions were made in full appreciation of the difficulties this places on manning moves for airmen in our AFSC. Our intent is that our airmen receive basic instruction in the duties that are fundamental for our AFSC. The 5-level core task sections, by default, become "feeder" sections for all other 2M0XX positions.
- 4.7.2. Another major topic of this U&TW centered on delays in obtaining security Clearances and subsequently the Personnel Reliability Program (PRP). Our airmen cannot enter into 5-level training without security clearances and PRP. We decided to address the PRP issue with changes to the wording of AFMAN 36-2108, Airmen Classifications, and address our problems with security clearances by message through the Air Staff (CFM has action to submit both).
- 5. Community College of the Air Force Academic Programs. Enrollment in CCAF occurs upon completion of basic military training. <u>Off duty education is a personal choice but highly encouraged</u>. Individuals desiring to become an Air Education and Training Command Instructor should actively pursue an associate degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools. CCAF provides the opportunity to obtain an Associate in Applied Sciences Degree. In addition to its associate degree program, CCAF offers the following:
- 5.1. Occupational Instructor Certification. Upon completion of instructor qualification training, consisting of an instructor methods course and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an Occupational Instructor.
- 5.2. Trade Skill Certification. When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency based assessment process for trade skill certification at one of four proficiency levels -

Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

5.3. Degree Requirements. The skilled (5) level must be held at the time of program completion with degree requirements for and Associate in Applied Science in Missile Maintenance Technology degree as follows:

Overall Requirements Subject Semester Hours Technical Education 24 Leadership, Management, and Military Studies 6 General Education 15 5.4. Technical Education (24 Semester Hours): A minimum of 12 semester hours of Technical Core subjects/courses must be applied and the remaining semester hours applied from Technical Core/Technical Elective subjects/courses. Requests to substitute subjects/courses must be approved in advance by the Technical Branch. Refer to the CCAF catalog for Application of Courses to the Technical Education area **Technical Core** Subjects/Courses Maximum Semester Hours CCAF Internship _______16 Missile Maintenance 16 **Technical Electives** Subjects/Courses Maximum Semester Hours Computer Science 6 Electricity/Electronics ______6 Engineering Graphics 3 Engineering Mechanics 3 Fluid Power 3

Industrial Safety	. 3
Maintenance Management	. 3
Materials and Processes	. 3
Nondestructive Inspection	. 3
Nuclear Weapons Systems Maintenance	
Quality Assurance	. 3

- 5.5. Leadership, Management, And Military Studies (6 Semester Hours): Professional military education and/or civilian management courses. The preferred method of completing Leadership, Management, and Military Studies is through attendance at an Airman Leadership School, MAJCOM NCO Academy, and/or Air Force Senior NCO Academy. However, civilian courses that emphasize fundamentals of managing human or material resources may also be applicable.
- 5.6. Physical Education (4 Semester Hours): Basic Military Training satisfies this requirement.
- 5.7. General Education (15 Semester Hours): This requirement is satisfied by application of courses accepted in transfer or by testing credit. The following is a specific breakout of requirements:

Subjects/Courses Oral Communication (Speech)	Semester Hours
Oral Communication (Speech)	
Written communication (English Composition)	•
Mathematics	
Intermediate algebra or a college-level mathematics course is required. mathematics course is applied as a Technical or Program Elective, a na meeting general education requirements Application criteria may be application Requirement. Social Science	tural science course plied as a General
Anthropology, Archeology, Economics, Geography, Government, Histor Psychology, Sociology.	
Humanities	3
Fine Arts (History, Criticism, and Appreciation), Foreign Language, Lit Religion.	erature, Philosophy,

5.8. Program Elective (15 Semester Hours): Satisfied with applicable Technical Education; Leadership, Management, and Military Studies; or General Education subjects/courses, including natural science courses meeting general education requirements application criteria. Six semester hours of CCAF degree-applicable technical credit, otherwise not applicable to this program, may be applied.

6. **Career Field Flow Charts**. Charts depicting this career path are presented. The Career path outlines when training is required for career progression within this specialty. This is a nominal timeline for comparison purposes only.

2M0X2 MISSILE AND SPACE SYSTEMS MAINTENANCE TRAINING FLOW

6 MONTHS	 COMPLETE 3-LEVEL COURSES MISSILE MAINT TECH SCHOOL AWARD 3-LEVEL AWARD OF BASIC MISSILE BADGE
12 MONTHS	- ENROLL IN 5-LEVEL CDC - BEGIN 5-LEVEL CORE TASK TRAINING
24 MONTHS	- COMPLETE CDC - COMPLETE CORE TASK TRAINING
36 MONTHS	- PROMOTE E-4/AWARD 5-LEVEL - ADDITIONAL CONTINUATION TRAINING
48 MONTHS	- AIRMAN LEADERSHIP SCHOOL - TRAINER DUTIES
6.5 YEARS	- PROMOTION TO E-5 - BEGIN 7-LEVEL CORE TASK TRAINING - BEGIN 7-LEVEL CDCs
8 YEARS	- 18 MONTHS TIG AS SSGT- COMPLETE 7-LEVEL CDCs- COMPLETE CORE TASK TRAINING
11 YEARS	SELECTION FOR PROMOTION TO E-6AWARD 7-LEVELNCO ACADEMYAWARD OF SENIOR MISSILE BADGE
14 YEARS	- SELECTION FOR PROMOTION TO E-7 - ADVANCED TRAINING COURSES
16 YEARS	- AWARD OF MASTER MISSILE BADGE
18 YEARS	- SELECTION FOR PROMOTION TO E-8 - SENIOR NCO ACADEMY - AWARD 9-LEVEL
23 YEARS	- SELECTION FOR PROMOTION TO E-9

PART I Section C - SKILL LEVEL TRAINING REQUIREMENTS

- 1. **Purpose**. The various skill levels in the career field are defined in terms of tasks and knowledge requirements for each skill level in the Missile and Space Systems Maintenance specialty. They are stated in broad, general terms and establish the standards of performance. The specific task and knowledge training requirements are identified in the STS.
- 2. Missile and Space Systems Maintenance Apprentice (3-skill level).
- 2.1. Specialty Qualifications.
- 2.1.1. Knowledge. Knowledge is desirable of oxidizers and fuels properties and characteristics; basic hydraulics, pneumatics, mechanics, and electricity; and missile propulsion principles.
- 2.1.2. Education. Completion of high school is required with courses in mathematics and physics desirable.
- 2.1.3. Training. The following requirements are mandatory for award of the 3-skill level:
- 2.1.3.1. Completion of mandatory requirements in AFI 36-2108.
- 2.1.3.2. Completion of the in-residence Missile and Space Systems Maintenance Apprentice course.
- 2.1.3.3. Shotgun familiarization and live fire of the weapon.
- 2.1.4. Other. Any record of emotional instability precludes entry, award, and retention of AFSC 2M0X2. Normal color vision as defined in AFI 48-143 is mandatory for entry into this AFSC. Eligibility for a Top Secret security clearance according to AFI 31-501 is mandatory for award of AFSC 2M032. Eligibility for Personnel Reliability Program certification IAW AFI 36-2104 is mandatory for entry in to the career field.
- 2.2. Training Sources/Resources. Completion of the basic Missile and Space Systems Maintenance Course at Vandenberg AFB, CA satisfies the knowledge and training requirements for the award of the 3-skill level. A list of all training courses to support education and training is in Part II, Section C of this CFETP.
- 3. Missile and Space Systems Maintenance Journeyman (5-skill level).
- 3.1. Specialty qualifications.

- 3.1.1. Knowledge. Knowledge is desirable of oxidizers and fuels properties and characteristics; basic hydraulics, pneumatics, mechanics, and electricity; and missile propulsion principles.
- 3.1.2. Education. Completion of high school is required with courses in mathematics and physics desirable.
- 3.1.3. Training. The following requirements are mandatory for award of the 5-skill level:
- 3.1.3.1. Completion of mandatory requirements in AFI 36-2108.
- 3.1.3.2. Completion of the 5-skill level CDC 2M052.
- 3.1.3.3. Qualification on applicable 5-skill level core tasks for the assigned weapon system and duty section (MMT or MHT) 5-level core tasks identified in Part II, Section A2.
- 3.1.4. Other. Any record of emotional instability precludes entry, award, and retention of AFSC 2M0X2. Normal color vision and depth perception as defined in AFPAM 48-133 is mandatory for entry into this AFSC. Eligibility for a Top Secret security clearance according to AFI 31-501 is mandatory for award and a Secret security clearance for retention of this AFSC. Eligibility for Personnel Reliability Program certification is required for retention in this AFSC
- 3.2. Five level core tasks All 2M032 personnel must be qualified/certified on the 5-level core tasks before being awarded a 5 skill-level. Personnel can be assigned to either MMT or MHT and qualify/certify in 5-level core tasks. See Part II, Section A2, Attachments 2 and 3 for a list of 5-level core tasks.
- 3.3. Training Sources/Resources. The STS identifies all the core tasks required for qualification in the individual's weapon system. Qualified trainers provide UGT and QT. Continuation (Advanced) training courses are available and individuals should attend based on training needs and duty position requirements. A list of all training courses to support education and training is in Part II, Section C of this CFETP.
- 3.4. Implementation. Entry into 5-level upgrade training may be initiated when an individual possesses the 3-skill level and has been assigned to the base. Then, the individual may be enrolled in the 2M052 CDC upon recommendation of the supervisor. Qualification training is initiated any time an individual is assigned duties he/she is not qualified to perform.
- 4. Missile and Space Systems Maintenance Craftsman (7-skill level)
- 4.1. Specialty Qualifications.

- 4.1.1. Knowledge. Knowledge is mandatory of mechanical systems that apply to missiles, spacelift boosters, payloads, Research and Development systems, associated launch systems, and aerospace ground equipment; mechanical, pneudraulic, pneumatic theory, circuitry, and schematic diagrams.
- 4.1.2. Education. To assume the grade of SSgt and MSgt, individuals must be graduates of the Airman Leadership School and NCO Academy, respectively.
- 4.1.3. Training. The following requirements are mandatory for award of the 7-skill level:
- 4.1.3.1. Completion of mandatory requirements in AFI 36-2108.
- 4.1.3.2. Completion of the 7-skill level CDC 2M072.
- 4.1.3.3 Qualification on all 7-skill level core tasks in Part II, Section A2, Attachment I, Common Missile and Space Maintenance Tasks.
- 4.1.4. Experience. Qualification is mandatory as a Missile and Space Systems Maintenance Journeyman. Also, experience is mandatory in performing or supervising functions in 2M0X2 production workcenters
- 4.1.5. Other. Any record of emotional instability precludes entry, award, and retention of AFSC 2M0X2. Normal color vision and depth perception as defined in AFI 48-143 for entry into this AFSC. Eligibility for a Top Secret security clearance according to AFI 31-501 is mandatory for award and retention of this AFSC.
- 4.2. Seven level core tasks All 2M052 personnel will be qualified/certified on the applicable core tasks before being awarded a 7 skill-level. See Part II, Section A2, Attachment 1 for a list of 7-level core tasks.
- 4.3. Training Sources/Resources. The STS identifies all the core tasks required for qualification in the individual's duty position. Qualified trainers provide UGT and QT. Continuation (Advanced) training courses are available and individuals should attend based on training needs and duty position requirements. A list of all training courses to support education and training is in Part II, Section C of this CFETP.
- 4.4. Implementation. Entry into 7-level upgrade training is initiated when an individual possesses the 5-skill level and has been selected for the promotion to the grade of SSgt. Qualification training is initiated any time an individual is assigned duties he/she is not qualified to perform.

- 5. Missile and Space Systems Superintendent (9-skill level).
- 5.1. Specialty Qualifications.
- 5.1.1. Knowledge. Possess advanced skills and knowledge of ICBM, Air launched Missiles, R&D systems, and Spacelift operations.
- 5.1.2 Education. To assume the grade of CMSgt, individuals must be graduates of the Senior NCO Academy.
- 5.1.3. Training. Completion of mandatory requirements in AFI 36-2108.
- 5.1.4. Experience. Qualification as one of the following is mandatory: Missile and Space Systems Electronics Craftsman, Missile and Space Systems Maintenance Craftsman, or Missile and Space Systems Facilities Craftsman.
- 5.1.5. Other. Any record of emotional instability precludes entry, award, and retention of AFSC 2M090. Normal color vision as defined in AFPAM 48-133 is mandatory for entry into this AFSC. Eligibility for a Top Secret security clearance according to AFI 31-501 is mandatory for award and retention of this AFSC.
- 5.2. Training Sources/Resources. A list of all training courses to support education and training is in Part II, Section C of this CFETP.
- 5.3. Implementation. Entry into OJT is initiated when an individual possesses the 7 skill level and is a SMSgt selectee. Qualification training is initiated any time an individual is assigned duties he/she is not qualified to perform.

PART I Section D - RESOURCE CONSTRAINTS

Purpose. This section of CFETP identifies known resource constraints which preclude minimal/desired training from being developed or conducted. This section includes a narrative explanation of each resource constraint and impact statement describing what effect each constraint has on training. Also identified in this section are the resources needed to satisfy training requirements, include information such as part numbers, national stock numbers, number of units required, cost, manpower, etc. Finally, this section includes action required, identifies the OPR, and establishes target completion dates. Resource constraints will be, at a minimum, reviewed and updated annually.

None identified

PART II Section A - SPECIALTY TRAINING STANDARDS

- **1**. **Implementation**. This STS will be used for technical training provided by AETC for classes beginning 9 Sep 2002 and graduating 22 Nov 2002.
- **2**. **Purpose**. This section identifies the specific task and knowledge training requirements required for personnel to be awarded specific skill levels and perform duties in AFSC 2M0X2. This section contains:
- 2.1. Section A1 The Proficiency Code Keys. The proficiency code key is used to indicate level of training and knowledge provided by resident training and career development courses. This proficiency code key applies to the training standards in section A2 and A3.
- 2.2. Section A2 The STS for the 2M0X2 Missile Systems Maintenance career field. It identifies the training requirements for the 3-/5-/7-skill levels of AFSC 2M0X2. The 3-level column reflects training requirements for the Apprentice course. The 5- and 7-level CDC columns identify the knowledge requirements for development of the 5-and 7-level CDCs for the 2M0X2 career field. Attachments to the STS list the qualification tasks for specific weapon systems/duties of the 2M0X2 career field. These attachments also identify the core tasks and any critical tasks.
- **3. Qualification training** will be documented on the appropriate attachment of the 2M0X2 STS unless the AFCFM has approved the use of other training systems to document and manage the training of 2M0X2 personnel.

Part II Section A1

	PROFICIENCY CODE KEY				
	SCALE	DEFINITION: THE INDIVIDUAL			
	VALUE				
	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)			
TASK PERFORMANCE	2	Can do most parts of the task. Needs help only on hardest parts. (PARTIALLY PROFICIENT)			
LEVELS	3	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)			
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)			
	a	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)			
TASK	b	Can determine step by step procedures for doing the task. (PROCEDURES)			
KNOWLEDGE LEVELS	c	Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)			
	d	Can predict, isolate, and resolve problems about the task. (ADVANCED THEORY)			
	A	Can identify basic facts and terms about the subject. (FACTS)			
SUBJECT KNOWLEDGE	В	Can identify relationship of basic facts and state general principles about the subject. (PRINCIPLES)			
LEVELS	C	Can analyze facts and principles and draw conclusions about the subject (ANALYSIS)			
	D Can evaluate conditions and make proper decisions about the subject. (EVALUATION)				

EXPLANATIONS

X This mark is used in course columns to show that training is required but not given due to limitations in resources.

^{*} A task knowledge value may be used alone or with a task performance scale value to define a level of a specific task. (Examples: b and 1b)

^{**} A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common in several tasks.

⁻ This mark is used alone instead of a scale to show that no proficiency training is provided in the course or CDC.

PART II Section A2

AFSC 2M0X2 SPECIALTY TRAINING STANDARD

- 1. **Purpose.** As prescribed in AFI 36-2201, this STS:
- 1.1. Lists the tasks, knowledge, and technical references (TR) necessary for airmen to perform in the 3-, 5-, and 7-skill level in the Missile and Space Systems Maintenance ladder of the Missile and Space Systems Career Field. These are based on an analysis of the duties in AFI 36-2108. Those tasks marked with an asterisk (*) will be trained in the resident wartime initial skills course

Note: Users are responsible for annotating training references to identify current references pending STS revision.

- 1.2. Shows <u>formal training</u> requirements. The basic STS shows the level to which task/knowledge training has been accomplished by the Technical Training Unit for courses 2M032 and 2M072, as described in ETCA, located on the HQ 2AF website. When two codes are used in the same task proficiency column, the first code is the established requirement for resident training on the task/knowledge, and the second code indicates the level of training provided in the course due to equipment shortages or other resource constraints.
- 1.3. Indicates the career knowledge provided in the 5-skill level and 7 skill level CDC. See ECI/AFSC/CDC listing maintained by the unit Enlisted Specialty Training (EST) manager for current CDCs or part II, section C of the CFETP.
- 1.4. Identifies Air Force minimum core task training requirements for award of AFSCs 2M052 and 2M072.
- 1.5. Provides OJT certification columns to record completion of task and knowledge training requirements.
- 1.6. Is a guide for <u>development of promotion tests</u> used in the Weighted Airman Promotion System (WAPS). Senior NCOs with extensive practical experience in the career fields develops specialty Knowledge Tests (SKTs) at the USAF Occupational Measurement Squadron. The test samples knowledge of STS subject matter areas judged by test development team members to be the most appropriate for promotion to higher grades. Questions are based on the study references listed in the WAPS catalog. Individual responsibilities are in AFI 36-2605.

- 1.7. Serves as a Job Qualification Standard (JQS). Trainees are trained, evaluated and qualified to the go/no go level. "Go" means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct use of procedures. This document may be automated in whole or part to reflect duty position requirements and qualifications. Partial automation requires annotation in the CFETP of location/system used to reflect duty position requirements/qualifications.
- 1.8. <u>Upgrade Certification Procedures:</u> Prior to upgrade, all 2M0X2 maintenance personnel, regardless of duty position, must satisfactorily complete upgrade training requirements identified in Part I, Section B, paragraph 3b for 5-level upgrade, paragraph 3c for 7-level upgrade, and paragraph 3d for 9-level upgrade. Trainees must also meet AFSC experience requirements outlined in AFI 36-2101 and AFI 36-2108. Work centers may add local upgrade core tasks and non-mandatory tasks to the applicable attachment. Completion of non-mandatory tasks pertinent to the unit will continue to be accomplished, as tasks become available for training.
- 1.8.1. Five skill level core tasks are listed in the following attachments for the duty positions shown:
- 1.8.1.1. Attachment 2 lists core Minuteman maintenance tasks
- 1.8.1.2. Attachment 3 lists core Peacekeeper maintenance tasks.
- 1.8.2. Seven skill level core tasks are listed in Part II, Section A2, Attachment 1, Common 2M0XX Missile and Space Maintenance Tasks.
- **2. Records Documentation.** Document training as follows:
- 2.1. <u>Identification</u>: Enter trainee, trainer, and certifying official information on the JQS identification page.
- 2.2. <u>Certification</u>: Certify tasks in pencil as follows:
- 2.2.1. Identify tasks required for current duty position by circling applicable task numbers and/or weapon system identifier.
- 2.2.1.1. If in skill level upgrade training, annotate required core tasks and other required tasks (as applicable) commensurate with the required upgrade skill level. (The only "circled" tasks should be the tasks required for the duty position.)
- 2.2.1.2. Once upgrade training is completed, remove the annotation for core-level tasks. (The only "circled" tasks should be the tasks required for the duty position.)
- 2.2.2. When task training starts, enter the training start date.

- 2.2.3. When the trainer and trainee agree to task proficiency, enter the completion date and both will initial the appropriate section of the STS. If third party certification is required, i.e. core tasks, task certification occurs when the appropriate certifier determines the trainee is proficient, and initials the certifying officials block for that task. Third party certifiers are mandatory for all core tasks and MAJCOM identified critical tasks (see AFI 36-2201 for exceptions). For non-core tasks, only the trainer's initials in the trainer block are required for certification. Within a given CFETP, the certifier may be the same individual as the trainer provided they meet all requirements as a certifier (see AFI 36-2201), however, a single person cannot be the trainer and certifier for the same task. (NOTE: Certification can be performed without a demonstration/performance of the task (i.e. at the certifier's desk)).
- 2.3. <u>Decertification:</u> To decertify an individual, who is no longer proficient in a task, erase the trainer's initials. For core tasks, erase the certifier's initials. Annotate 623a with reason for decertification.
- 2.4. <u>Recertification:</u> Task recertification requires some level of retraining. To recertify an individual on a previously certified task, erase the start date, completion date, trainee initials, and trainer initials. Recertify following the procedures in paragraphs 2.2.2. and 2.2.3. above.
- 2.5. <u>Transcription:</u> When necessary, e.g., a new CFETP is published, the supervisor or designated representative may transcribe the data to a new CFETP Part II. Following the transcription, annotate an AF Form 623a to explain the transcription actions. The supervisor will enter his or her name and initials following the explanation. This annotation will be the certifying process that ensures all applicable information was properly transferred from the old CFETP Part II. Transcription should be performed by the supervisor or a trainer or certifier (other than the person who the CFETP is for). Give the old CFETP Part II to the trainee to retain as training history. To transcribe data, the supervisor (or designated representative) will:
- 2.5.1. For tasks required in current duty position:
- 2.5.1.1. Identify required tasks for current duty position by circling the applicable task number in the new STS/JQS.
- 2.5.1.2. Have the trainee initial in the "trainee block" in the new STS/JQS.
- 2.5.1.3. Initial in the trainer or certifier block, for non core tasks as applicable in the new STS/JQS. Initial in the certifier block for core tasks as applicable in the new STS/JQS.
- 2.5.1.4. Enter the transcription date in the "comp date" column.

- 2.5.2. For tasks not required in current duty position:
- 2.5.2.1. Transcribe the previous "comp date" to the new "comp date" column.
- 2.5.2.2. Ensure all completion dates are transcribed from the old STS/JQS to the new STS/JQS.
- 2.6. Tasks that are not included in the STS may be added to a local attachment, provided the same format as the STS is used. These attachments will be reviewed annually during the CFETP review to determine if these tasks should be added to the STS.
- 3. **Proficiency Code Keys.** The proficiency code key is used to indicate level of training and knowledge provided by resident training and career development courses.
- 4. Report inadequacies and suggested corrections to this STS to the 2M0XX AFCFM, 1030 Air Force Pentagon, Washington DC 20330-1030, DSN 222-9941 (through the MAJCOM functional manager.) All approved changes to this CFETP will be forwarded to 532 TRS/DOAT, 597 7th St, Vandenberg AFB, CA, 93437-5305.

This STS supersedes AFSC 2M0X2 STS in CFETP 2M0X2, Parts 1 - 2, 31 Oct 2000.

MICHAEL E. ZETTLER, Lt General, USAF DCS/Installations & Logistics

STS Attachments: 8

- 1. Common 2M0XX Msl & Spc Mnx Tasks
- 2. ICBM Systems Mnx Tasks
- 3. Peacekeeper Mnx Tasks
- 4. ICBM FDE Mnx Tasks
- 5. Spacelift Mnx Tasks
- 6. Depot Storage & Handling Tasks
- 7. Laboratory Tasks

TASK#	TASK / KNOWLEDGE ITEM & TRAINING REFERENCE	3 Level Course	5 Level CDC	7 Level CDC
1	CAREER LADDER PROGRESSION TR: AFI 36-2101, 2M0X2 Career Field Education and Training Plan (CFETP)			
1a	Progression in career ladder 2M0X2	-	В	-
1b	Duties of AFSC 2M0X2	-	В	-
2	AF OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM TR: AFI 91-X			
2a *	Hazards of AFSC 2M0X2 TR: AFI 91-301	A	-	-
2b	Safety TR: TOs 00-25-245, 21-LG118A-2-10, 21M-LGM30G-2-10 (-1)	В	В	В
2c *	USAF Mishap Prevention Program TR: AFI 91-202, TO 31-1-141	Α	-	-
2d *	Missile safety TR: AFIs 91-107, 91-114, 91-202	А	-	-
2e *	Nuclear surety TR: AFIs 91-104, 91-105, 91-202	Α	-	-
2f *	Explosive safety TR: AFIs 91-201, 91-202	Α	В	1
2g	Hazard report TR: AFI 91-202	Α	-	-
2h	Environmental compliance	-	-	-
2h(1)	Overview of hazardous waste TR: AFI 32-7041, 32-7042; 40 CFR Part 261, 262; 29 CFR Part 1910	А	-	-
2h(2)	Hazardous Material TR: 49 CFR Part 107, 120, 172	-	-	-
2h(2a)	Handler responsibilities	Α	-	-
2h(2b)	Transportation requirements	Α	-	-
2h(3)	Impact on environment of Ozone Depleting Chemicals (ODCs) TR: 40 CFR Part 82	А	-	-
2h(4)	Overview of Federal Facilities Compliance Act (FFCA) TR: FFCA, Federal Facilities Compliance Strategy EPA/130/4-89-003	А	-	-
2h(5)	Overview of Environmental Compliance Assessment and Management Program TR: B58AFI 32-7045	А	-	-
2h(6)	Overview of Air Force Pollution Prevention Program (P3) TR: AFI 32-7080	А	-	-
2h(7)	Hazardous material pharmacy concept of operation TR: AFI 32-7086	А	-	-
2h(8)	Hazardous communication TR: 29 CFR Part 1910, AFOSH 161-21	В	-	-
2h(9)	Polychlorinated Biphenyls (PCBs) TR: 40 CFR Part 761	А	-	-
3	PUBLICATIONS TR: AFI 37-X			
3a	Use standard publications	А	В	-
3b	Technical Order System TR: AFPD 21-3, TOs 0-1-01, 0-1-02, 00-5-1, 00-5-2	-	-	-
3b(1)	Description	А	В	-

TASK #	TASK / KNOWLEDGE ITEM & TRAINING REFERENCE	3 Level Course	5 Level CDC	7 Level CDC
3b(2)	Use technical orders	3c	-	-
3b(3)	Initiate TO improvement report	Α	В	-
3c	CEMs TR: AFSPCIND 0-7, AFSPCI 32-1009	-	В	-
4	MAINTENANCE MANAGEMENT TR: AFPD 21-1, AFIs 21-114, 21-108, 38-101, AFSPCI 21-0114, AFSPCI 21-0108			
4a	Functions and responsibilities of missile and space organizations	-	В	В
4b	Functions of missile/space maintenance units	-	В	В
4c	Deficiency reporting TR: TO 00-35D-54	-	Α	В
4d *	Hardness assurance program TR: AFI 32-1054, TOs 21-LG118A-2-10, 21M-LGM30G-2-31, 21M-LGM30G-2-10 (-1)	А	В	-
4e	Improved Maintenance Management Program TR: TO 33D9-61-76-1, Document #IMMP-SIOM, Vol 1 of 1, dated 21 Dec 95, Tutorials	-	В	В
4f	Reliability and maintainability TR: AFP 80-24	-	-	В
4g	Status reporting Force Management Information System (FMIS) TR: AFI 21-103, MCR 55-8, AFSPCI 21-1030	-	-	В
5	COMMON MAINTENANCE PRACTICES TR: TOs 00-25-234, 1-1A-8, 21-LG118A-2-10			
5a	Use tools TR: TOs 32-1-2, 32-1-101, 32-1-151, 32B14-3-1-101	3c	В	-
5b	Use aerospace hardware TR: TOs 1-1A-8, 1-1A-15	b	В	В
5c	Corrosion identification TR: TO 1-1-2	Α	-	-
5d	Perform electrostatic discharge control procedures TR: TO 00-25-234	3с	В	-
5e	AC/DC Current Terminology	В	-	-
6	RESEARCH AND DEVELOPMENT TR: AFI 10-201			
6a	Missions of Laboratories	-	Α	-
6b	Missions of Test and Evaluation Center	-	Α	-
6c	Inert gases TR: AFMAN 161-30, VOL II; TO 42B5-1-2	-	-	В
6d	Cryogenics TR: AFMAN 161-30, VOL II; AFI 23-201	-	-	В
6e	Laser systems TR: TO 31-1-141-3, AFOSH STD 161-10	-	-	В
6f	Optical systems TR: TO 33B4-8-9-1	-	-	В
6g	Vacuum systems TR: TO 00-25-233	-	-	В
6h	Integrated system safety TR: AF Systems Safety Handbook	-	-	В

TASK#	TASK / KNOWLEDGE ITEM & TRAINING REFERENCE	3 Level Course	5 Level CDC	7 Level CDC
6i	Liquid and solid propulsion systems TR: Titan II SLV Propulsion Subsystems and Titan IVB Type 1 Training	-	-	В
6j	Propellant properties TR: AFMAN 161-30, VOL I & II	-	-	В
6k	Clean-room standards TR: Federal Standard 209E, TO 00-25-203	-	-	В
61	Ordnance systems TR: AFI 91-201	-	_	В
7	MAINTENANCE PRINCIPLES TR: TO 00-25-223, 00-25-229, 1-1A-8, 33-1-19, 42E1-1-1, 42E2-1-2, 44H3-1-3			
7a	Pneumatic systems TR: TO 42B5-1-2	-	-	-
7a(1)	Theory and operation	В	В	С
7a(2)	Read pneumatic flow diagrams	-	В	-
7b	Hydraulics systems TR: TO 42B2-1-3	-	-	ı
7b(1)	Theory and operation	В	В	С
7b(2)	Read hydraulic flow diagrams	-	В	-
7c	Moving and lifting heavy equipment	-	Α	В
7d	Non-destruct testing	-	Α	В
7e	Proofload testing	-	Α	В
8	SPACE AND MISSILE SYSTEMS TEST/INSPECTION PROCESSES			
8a	Test and evaluation TR: AFI 99-103	-	-	В
8b	Simulated Electronic Launch Minuteman (SELM) TR: TOs 21M-LGM30G-1-17, 21M-LGM30G-1-18	-	-	В
8c	Simulated Electronic Launch Peacekeeper (SELP) TR: TO 33D9-61-108	-	-	В
9	TEST EQUIPMENT			
9a	Operate test equipment	-	-	-
9a(1) *	Explosive Set Circuitry Test Set TR: TOs 33D9-38-15-21	3c	В	-
9a(2)	Megohmmeter insulation tester TR: TOs 33A1-4-29-1, 33A1-4-35-1, 33A1-12-1006-1, 33A1-12-185-11, 33A1-12-1212-1	-	A	-
9a(3) *	Colorimetric gas tester TR: TOs 21M-LGM30G-2-33, 21M-LGM30G-2-10 (-1), 21-LG118A-2-10	3c	В	1
9a(4)	MGCS certification test set TR: TO 21-LG118A-12-1	-	А	-
9a(5)	Electronic freon leak detector TR: TOs 21-LG118A-2-10, 21-LG118A-2-34	-	Α	-
9a(6)	Digital Multimeters TR: TOs 33A1-12-1059-1, 33A1-12-1092-1, 33A1-12-1176-1, 33A1-12-1177-1, 33A1-12-1198-1, 33A1-12-1199-1	3c	-	-
9b	Cable retraction test kit TR: TOs 21M-LGM30G-2-28-X, 33K-1-X, 35M1-1-101	-	Α	-

TASK#	TASK / KNOWLEDGE ITEM & TRAINING REFERENCE	3 Level Course	5 Level CDC	7 Level CDC
9c *	Leak test fixture operate TR: TOs 1-1A-8, 21M-LGM30G-2-22, 33K-1-X, 35M1-1-101	2b	В	_
10	RAISE/LOWER EQUIPMENT TR: TOs 21M-LGM30G-2-10	1b	-	-
11	MINUTEMAN III (LGM-30G) TR: TOs 21M-LGM30G-1-1, 21M-LGM30G-2-33			
11a	Characteristics	А	В	-
11b	Motors/stages/interstages	Α	В	-
11c	Terminal countdown sequence description	-	-	В
12	PEACEKEEPER (LG-118A) TR: TOs 21-LG118A-1, 21-LG118A-2-28, 21-LG118A-2-34, 21-LG118A-2-41, 35M3-2-20-3			
12a	Characteristics	А	В	-
12b	Motors/stages/interstages	А	В	-
12c	Canister	А	В	-
12d	Reentry System	А	В	-
13	DELTA TR: AU-18 Space Handbook; Delta II MLVIII Self Study Guide			
13a	Mission	-	Α	-
13b	Characteristics	-	Α	В
13c	Space Launch Complex	-	Α	В
14	ATLAS II TR: Atlas II AS Type 1 Training			
14a	Mission	-	Α	-
14b	Characteristics	-	Α	В
14c	Space Launch Complex	-	Α	В
15	TITAN II TR: Titan II SLV Propulsion Subsystem (GenCorp Aerojet dated: 1992); AU-18 Chap 6, 14 & 15			
15a	Mission	-	Α	-
15b	Characteristics	-	Α	В
15c	Space Launch Complex	-	Α	В
16	TITAN IV TR: Titan IVB Type 1 Training			
16a	Mission	-	Α	-
16b	Characteristics	-	Α	В
16c	Space Launch Complex	-	Α	В
17	CENTAUR TR: Titan IVB Type 1 Training			
17a	Mission	-	Α	-
17b	Characteristics	-	Α	В

TASK#	TASK / KNOWLEDGE ITEM & TRAINING REFERENCE	3 Level Course	5 Level CDC	7 Level CDC
18	INERTIAL UPPER STAGE TR: Titan IVB Type 1 Training			
18a	Mission	-	Α	-
18b	Characteristics	-	Α	В
19	SATELLITE SYSTEMS TR Atlas IIAS and Titan IVB Type 1 Training; Delta II MLVII Self Study Guide; AU-18 Space Handbook			
19a	Function	-	Α	-
19b	Characteristics	-	-	В
20	LAUNCH FACILITY, MISSILE ALERT FACILITY, AND SUPPORT BASE FACILITIES			
20a	Minuteman III Launch Facility TR: TOs 21M-LGM30G-1-1, 21M-LGM30G-2-10(-1), 21M-LGM30G-2-7-X	Α	В	-
20a(1) *	Enter LER (See note 5)	1b	-	=
20a(2) *	Enter LSB	1b	-	-
20a(3) *	Enter and exit Launch Tube	2b	-	-
20a(4) *	Exit LER	1b	-	-
20a(5) *	Exit LSB	1b	-	-
20a(6)	Perform emergency shutdown	1b	В	-
20a(7)	Evacuate launch facility for EWO launch condition	1b	В	-
20a(8)	Follow emergency procedures for electrical isolation of LSB	1b	В	-
20a(9)	Perform LF hostile securing	1b	-	-
20a(10)	Personnel Access System (PAS) TR: TOs 21M-LGM30F-2-19, 35M1-99-2-2	-	В	-
20a(11)	Blast Doors TR: TOs 21M-LGM30F-112, 21M-LGM30G-2-28-X, 35M1-1-101, 35M3-11-2-1, 35M3-11-3-1	-	В	-
20a(12)	Shock Systems TR: TOs 21M-LGM30G-2-28-X, 35M1-1-101	-	-	-
20a(12a)	Mechanical	-	В	•
20a(12b)	Pneumatic	-	В	ı
20a(12c)	Hydraulic	-	В	-
20a(13)	Launcher closure system TR: TOs 21M-LGM30F-112, 21M-LGM30G-2-28-X, 21M-LGM30G-2-10(-1), 35M1-1-101; CEMs 21-SM80X-2-24-X, 21-SM80X-2-26-X, 11A15-1-167-1	A	В	В
20a(13a) *	Open launcher closure	2b	-	-
20a(13b) *	Close launcher closure	2b	-	-
20a(13c)	Perform destructive break in	-	В	-
20a(14)	Missile suspension system	Α	В	В
20a(14a)	Remove explosive bolts	2b	-	-
20a(14b)	Install explosive bolts	2b	-	-
20a(15)	Umbilicals TR: TOs 21M-LGM30G-2-22, 11A15-1-167-1	А	В	В

TASK#	TASK / KNOWLEDGE ITEM & TRAINING REFERENCE	3 Level Course	5 Level CDC	7 Level CDC
20a(15a) *	Disconnect the upper umbilical at the D-box	2b	-	_
20a(15b) *	Disconnect the upper umbilical at the missile	2b	-	-
20a(15c) *	Connect the upper umbilical at the missile	2b	-	-
20a(15d) *	Connect the upper umbilical at the D-box	2b	-	-
20a(15e) *	Disconnect the skirt umbilical at the D-box	2b	-	-
20a(15f) *	Disconnect the skirt umbilical at the missile	2b	-	-
20a(15g) *	Connect the skirt umbilical at the missile	2b	-	-
20a(15h) *	Connect the skirt umbilical at the D-box	2b	-	-
20a(16)	Install safing pins TR: TO 21M-LGM30G-2-33	2b	В	-
20a(17)	Remove safing pins TR: TO 21M-LGM30G-2-33	2b	В	-
20b	Peacekeeper Launch Facility TR: TOs 21-LG118A-1, 21-LG118A-2-10, 21-LG118A-2-28	A	В	-
20b(1)	Missile suspension system	Α	В	-
20b(2)	Missile Umbilical Group/Umbilical Retract Mechanism (MUG/URM) TR: TOs 21-LG118A-2-32, 21-LG118A-2-241	-	В	-
20c	Missile Alert Facility	Α	В	-
20d	Missile Support Base	-	В	-
21	MISSILE AEROSPACE VEHICLE EQUIPMENT TR: TO 21M-LGM30G-2-33			
21a	MK12/12A Reentry System (RS)	Α	В	В
21a(1) *	Inspect insulation	2b	В	-
21a(2) *	Remove	2b	В	_
21a(3) *	Install	2b	В	_
21a(4) *	Warhead monitor loop checkout	2b	В	-
21a(5) *	Electrical system checkout	2b	В	-
21a(6)	Load and unload	A	В	-
21a(7) *	Handle	2b	В	-
21a(8)	Transport	-	В	-
21b	Missile Guidance Set (MGS)	A	В	В
21b(1) *	Inspect insulation	2b	В	-
21b(2)	Repair insulation	-	В	-
21b(3) *	Remove	2b	В	-
21b(4) *	Install	2b	В	-
21b(5)	MGS to RS interface cable checkout	A	В	-
21b(6)	Remove components TR: TO 11A15-1-167-1; AFSPCI 91-1005, SD 501-12	2b	В	-
21b(7)	Install components TR: TO 11A15-1-167-1; AFSPCI 91-1005, SD 501-12	2b	В	-
21b(8)	Loading and unloading	Α	В	-

TASK#	TASK / KNOWLEDGE ITEM & TRAINING REFERENCE	3 Level Course	5 Level CDC	7 Level CDC
21b(9)	Transport	-	В	-
21b(10) *	Accidental missile ignition checkout	2b	В	-
21c	Propulsion System Rocket Engine (PSRE)	А	В	В
21c(1) *	Inspect insulation	2b	В	-
21c(2)	Repair insulation	-	В	-
21c(3)	Remove	-	В	-
21c(4)	Install	-	В	-
21c(5)	Loading and unloading TR: TO 11A15-1-167-1	-	В	-
21c(6)	Emergency handling procedures	-	В	-
21c(7)	Emergency transporting procedures	-	В	-
21c(8)	Handling TR: TO 11A15-1-167-1	-	В	-
21c(9)	Transport TR: TO 11A15-1-167-1	-	В	ı
21d	Post Boost Control System (PBCS)	A	В	В
21d(1) *	Remove	2b	В	-
21d(2) *	Install	2b	В	-
21d(3)	Loading and unloading	А	В	-
21d(4) *	Handling TR: TO 11A15-1-167-1	2b	В	-
21d(5)	Transport TR: TO 11A15-1-167-1	-	В	1
21e	MK21 Reentry System TR: TOs 21-LG118A-2-3X, 21-LG118A-2-41	-	В	В
21f	Missile Guidance and Control Set (MGCS) TR: TOs 21-LG118A-1, 21-LG118A-2-34, 21-LG118A-12-1	-	В	В
22	PAYLOAD TRANSPORTER (PT) TR: TOs 21M-LGM30G-2-33, 36A9-8-49-1, 36A9-8-58-1, AFSPCI-31-1101			
22a	Function and description	Α	В	В
22b *	Operate hoist	2b	-	-
22c *	Position and stabilize	2b		_
22d	Destabilize	2b	-	-
22e	Perform preoperational checkout	2b	-	-
22f	Operate Auxiliary Power Unit	2b	-	-
22g	Operate Environmental Control System	2b	-	-
22h	Operate Pneumatic System	2b	-	-
22i	Operate Physical Security System	2b	-	-
23	TRANSPORTER ERECTOR (TE) TR: TOs 21M-LGM30F-2-2-1, 35A2-5-36-1, 35D3-11-52-X, 35E9-266-1	-	В	В
24	MISSILE TRANSPORTER (MT) TR: TOs 21M-LGM30F-2-2-1, 35M4-3-7-1	-	В	-

AFSC 2M0X2 **STS**MISSILE AND SPACE SYSTEMS MAINTENANCE

TASK#	TASK / KNOWLEDGE ITEM & TRAINING REFERENCE	3 Level Course	5 Level CDC	7 Level CDC
25	ROCKET MOTOR TRAILER TR: 35M4-3-6-1, 21M-LGM30B-2-26	-	В	-
26	MISSILE HANDLING EQUIPMENT TR: TOs 21M-LGM30F-2-2-1, 35A2-5-25-1, 35M19-3-26-1	-	В	-
27	MISSILE HANDLING AND TRANSPORTING TR: TOs 1C-141B-9, 21M-LGM30F-2-2-1, 35D3-11-52-2	-	В	-
28	ELEVATOR WORK CAGE/GUIDED MISSILE MAINTENANCE PLATFORM (GMMP) TR: TOs 21M-LGM30G-2-10 (-1), 35A4-2-31-1, 35A4-4-9-1			
28a	Function and description	Α	В	-
28b	Inspect	-	В	-
28c *	Install	2b	-	-
28d *	Remove	2b	-	-
28e *	Operate	3c	-	-
29	GUIDANCE AND CONTROL (G&C) PURGING MANIFOLD TR: TOs 33K-1-X, 35M1-1-101, 36A9-8-40-1, 36A9-8-49-1, 42B5-1-2, 36A9-8-58-1			
29a	Function	Α	В	-
29b	Description	Α	В	-
30	HYDRAULIC PRESSURE CHARGING SET TR: TOs 21-LG118A-2-28, 21M-LGM30G-2-28-X, 33K-1-X, 35M5-3-16-2	-	В	-
31	PORTABLE AIR CONDITIONER TR: TOs 21M-LGM30F-2-2-1, 35C2-3-370-1, 35C2-3-370-14, 35C2-3-493-1, 35E9-25-3, 35E9-37-2, 35E9-270-1	-	В	-
32	HYDRAULIC PUSHER SET TR: TOs 21-LG118A-2-10, 21M-LGM30G-2-10 (-1), 35M27-3-11-1			
32a	Function and description	Α	В	-
32b	Inspect	-	В	-
32c *	Operate	3c	-	-
32d	Service	-	В	-
33	COMPRESSED GAS CYLINDER/VALVE ASSEMBLY TR: TOs 35M1-1-101, 21M-LGM30G-2-10 (-1), 21-LG118A-2-10			
33a	Function and description	Α	В	-
33b *	Operate	3c	-	-
34	HYDRAULIC PURGE SET TR: TO 35D3-11-52-2	-	В	-
35	PEACEKEEPER TRANSPORTATION AND HANDLING EQUIPMENT TR: TOs 21-LG118A-2-10, 21-LG118A-2-34, 35M3-8-14-1	-	В	-
35a	Emplacer	Α	В	-
35b	Air Elevator Support Trainer (AEST)	Α	В	-
35c	Type II Transporter	Α	В	-
36	LAUNCH EJECTION GAS GENERATOR (LEGG) TR: TOs 21-LG118A-2-10, 21-LG118A-2-31, 21-LG118A-2-32, 21-LG118A-2-33	А	В	-
37	MISSILE AIR ELEVATOR TR: TOs 21-LG118A-2-10, 21-LG118A-2-32, 21-LG118A-2-241	Α	В	-

AFSC 2M0X2 **STS**MISSILE AND SPACE SYSTEMS MAINTENANCE

TASK#	TASK / KNOWLEDGE ITEM & TRAINING REFERENCE	3 Level Course	5 Level CDC	7 Level CDC
38	CODE HANDLING PROCEDURES TR: AFSPCI 91-1005, SD 91-105	Α	-	-
	NOTE 1: Items in column 1 marked with an asterisk (*) are tasks that are trained in resident wartime course			
	NOTE 2: Applicable AFSC job oriented safety training is integrated throughout the courses			
	NOTE 3: Applications of the USAF technical data systems are integrated throughout the courses			
	NOTE 4: Mission Ready Airman tasks ("3c" level) will be certified by the technical school in the applicable attachment (identified with a "3" in the core task column)			
	NOTE 5: This task requires initial shotgun qualification			

Trainee/Trainer/Certifier Identification Table

THIS BLOCK IS FOR IDE	ENTIFICATION PURPOSES ONLY
NAME OF TRAINEE	
PRINTED NAME (<i>LAST, FIRST, MIDDLE INITIAL</i>)	INITIALS (WRITTEN) SSAN
PRINTED NAME OF TRAINING/CERTIFY	
N/I	N/I
NЛ	N/I
N/I	N/I
NЛ	N/I
NЛ	N/I
N/I	N/I

ITEM #	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
1	AF OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM						INTIALS
	TR: AFI 91-301						
1a	Use safety practices when working with weapon system equipment						
	TR: TO applicable to the weapon system						
1b	Report hazards TR: AFI 91-202						
1c	Inspect safety equipment for serviceability TR: TOs 00-25-245, 21-LG118A-2-10, 21-LG118A-2-17-2, 21M-LGM30F-2-17-9, 21M-LGM30G-2-10 (-1)						
1d	Comply with hazardous material safety requirements TR: AFOSH STD 161-21	3					
2	PUBLICATIONS						
2a	Use standard publications TR: AFI 37-X; AFSPCI 21-0114						
2b	Use technical orders TR: AFPD 21-3; TOs 00-5-1, 00-5-2	3					
2c	Initiate TO improvement report TR: TO 00-5-1						
2d	Use supply publications/Illustrated Parts Breakdown (IPB) TR: AFMAN 23-110						
2e	Use Civil Engineering Manuals (CEM) TR: AFSPCIND7; AFSPCIs 32-1005, 32-1006, 32-1009	3					
2f	Initiate CEM improvement report TR: AFSPCIs 32-1005, 32-1006, 32-1009						
3	MAINTENANCE MANAGEMENT TR: AFPD 21-1; AFIs 21-108, 21-114; AFSPCI 21-0114; ACCI 21-101						
3a	Complete Maintenance Data Collection (MDC) forms TR: TOs 00-20-2, 21M-AGM86-06, 21-AG129-06, 21M-LGM30F-06-X; CEM 21-SM80-06						
3b	Use Core Automated Management System (CAMS) TR: AFCSM 21-556 thru 21-579						
3c	Use Improved Maintenance Management Program (IMMP) TR: Applicable Software and System Manuals						
4	TOOLS AND HARDWARE TR: TOs 00-25-234, 1-1A-8, 21-LG118A-2-10, 21-LG118A-12, 21M-LGM30F-12, 21M-LGM30G-2-10(-1), 21M-LGM30G-2-31						
4a	Use tools TR: TOs 32-1-2, 32-1-101, 32-1-151, 32B14-3-1-101	3					
4b	Use aerospace hardware TR: TOs 1-1A-8, 1-1A-14, 1-1A-15	3					
5	SUPERVISION AND TRAINING TR: AFI 36-2201; AFSPCI 21-0114; ACCI 10-204						
5a	Supervision						
5a(1)	Orient new personnel	7					

ITEM #	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
5a(2)	Conduct predispatch/pretask maintenance briefings	7					INITIALS
5a(3)	Plan work assignments	7					
5a(4)	Schedule work assignments	7					
5a(5)	Evaluate technical school graduates						
5a(6)	Perform team chief duties						
5a(7)	Perform production inspector duties						
5a(8)	Perform team member duties						
5b	Training						
5b(1)	Plan and supervise training programs						
5b(2)	Conduct qualification training TR: AF Trainer Course						
5b(3)	Prepare lesson plans						
5b(4)	Maintain training records	7					
5b(5)	Certify trainee qualifications TR: AF Trainer Course						
6	GENERAL MAINTENANCE						
6a	Operate portable heaters TR: TO 35E7-2-11-11; Applicable Manufacturer's Operation and Service Instructions						
6b	Operate portable pumps TR: TOs 21-LG118A-2-10, 21M-LGM30G-2-10 (-1); Applicable Manufacturer's Operation and Service Instructions						
6c	Tubing maintenance TR: TOs 00-25-233, 1-1A-8						
6c(1)	Flare tubing						
6c(2)	Swage tubing						
6d	Solder/Solderless connectors TR: TOs 00-25-234, 1-1A-14, 1-1A-15, 21M-LGM30F-12, 31-1-141-15, 31-10-7, 34W4-1-5, 34W4-1-7, 34W4-1-8						
6d(1)	Soft soldering						
6d(2)	Silver soldering						
6d(3)	Electrical soldering						
6d(3a)	Perform basic soldering/desoldering procedures						
6d(3b)	Perform soldering/desoldering on printed circuit boards						
6d(4)	Solderless connectors						
6d(4a)	Assemble solderless crimp connectors						
6d(4b)	Assemble solderless multipin connectors				1		

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
6e	Pneumatics TR: TOs 00-25-223, 00-25-229, 1-1A-8, 33-1-19, 42B5-1-2, 42E1-1-1, 42E2-1-2, 44H3-1-3						INITIALS
6e(1)	Remove components						
6e(2)	Install components						
6e(3)	Read pneumatic flow diagrams						
6e(4)	Replace hoses						
6e(5)	Replace tubing						
6e(6)	Replace seals						
6e(7)	Fabricate tubing						
6e(8)	Fabricate hoses						
6f	Hydraulics TR: TOs 00-25-223, 00-25-229, 1-1A-8, 33-1-19, 42B2-1-3, 42E1-1-1, 42E2-1-2, 44H3-1-3						
6f(1)	Remove components						
6f(2)	Install components						
6f(3)	Read hydraulic flow diagrams						
6f(4)	Replace hoses						
6f(5)	Replace tubing						
6f(6)	Replace seals						
6f(7)	Fabricate tubing						
6f(8)	Fabricate hoses						
6g	Standard Test Equipment TR: TO 33-1-21; Applicable Manufacturer's Operation and Service Instructions						
6g(1)	Use analog multimeters TR: TOs 33A1-12-2-1, 33A1-12-216-1, 33A1-12-681-1, 33A1-12-773-1, 33A1-12-933-1						
6g(2)	Use bridge meters TR: TOs 33A1-6-63-1, 33A1-16-91-1						
6g(3)	Use counters						
6g(4)	Use digital multimeters TR: TOs 33A1-12-1059-1, 33A1-12-1092-1, 33A1-12-1176-1, 33A1-12-1177-1, 33A1-12-1198-1, 33A1-12-1199-1	3					
6g(5)	Use modulation meters						
6g(6)	Use oscilloscopes						
6g(7)	Use power meters						
6g(8)	Use power supplies TR: TO 33AA17-176-1						
6g(9)	Use signal generators						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
6g(10)	Use megohmeters TR: TOs 33A1-4-29-1, 33A1-4-35-1						
6g(11)	Use bonding meters TR: TO 33A1-12-1124-1						
6g(12)	Use ammeters/current probes TR: TOs 33A1-12-145-21, 33A1-12-871-1, 33DA98-15-1						
6g(13)	Use ohmmeters TR: TOs 33A1-12-185-11, 33A1-12-1006-1						
6h	Perform operator maintenance on weapon system test equipment TR: TO 33-1-27						
6i	General Maintenance TR: TOs 00-25-234, 1-1A-1, 1-1A-8, 1-1A-14, 1-1A-15, 33D9-61-58-2						
6i(1)	Repair equipment panels and cases						
6i(2)	Perform safety wiring						
6i(3)	Repair wiring						
6i(4)	Repair general connectors						
6i(5)	Repair shielded and coaxial connectors						
6i(6)	Perform cable binding and lacing						
6i(7)	Repair crimped electrical connections						
6i(8)	Qualify solderless wire wrapping Tool Kit (TK-148/g)						
6i(9)	Perform wire wrapping						
6i(10)	Perform systematic troubleshooting						
6i(11)	Perform electronic part replacement and repair						
6i(12)	Repair electrical contact strips						
6i(13)	Perform printed circuit board handling and storage procedures	3					
6i(14)	Perform electrostatic discharge control procedures	3					
6i(15)	Perform visual inspections						
6i(16)	Clean electronic equipment						
6j	Emergency breathing apparatus TR: TOs 14P4-9-31, 14P5-3-1, 14S5-11-11, 14S5-16-1, 14S5-18-1, 14S5-19-11, 14S5-29-1, 14S5-30-2, 14S5-32-1; LJGs 20AF-01-001, 20AF-01-002; Applicable Manufacturer's Operation and Service Instructions						
6j(1)	Perform periodic maintenance						
6j(2)	Troubleshoot						
6j(3)	Repair						
6j(4)	Operate						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
6j(5)	Self Contained Atmospheric Protective Ensemble (SCAPE) TR: Local Training Course						
6j(6)	Emergency response equipment TR: TOs 21-LG118A-2-32, 21M-LGM30G-2-33; OO-ALC 91-1; LJGs 20AF-01-001, 20AF-01-002; Applicable Manufacturer's Operation and Service Instructions; Wing emergency response plan						
6j(6a)	Level A suit						
6j(6a1)	Inspect						
6j(6a2)	Use						
6j(6b)	Air skid						
6j(6b1)	Inspect						
6j(6b2)	Service						
6j(6b3)	Operate						
6k	Communications equipment						
6k(1)	Inspect						
6k(2)	Service						
6k(3)	Operate						
6I	Bench stock items TR: AFMAN 23-110; AFSPCI 21-0114; ACCI 21-101						
6l(1)	Issue						
6l(2)	Inventory						
61(3)	Maintain						
6m	Isolate faulty components TR: TO 31-1-141 Series						
6m(1)	Basic circuits						
6m(2)	Resistors						
6m(3)	Relays/solenoids						
6m(4)	Capacitors						
6m(5)	Semi-conductors						
6m(6)	Inductors						
6m(7)	Transformers						
6n	RFI / EMI Gaskets TR: TO 21M-LGM30F-112, 21-AG129-2-1, 33D9-19-55-1						
6n(1)	Inspect	3					
6n(2)	Repair						
60	Terminal Swagger Kit TR: TO 33A16-3-1						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
60(1)	Operate						INITIALS
60(2)	Service						
6р	Portable cable terminal pull tester TR: TO 33A8-4-6-1						
6p(1)	Operate						
6p(2)	Service						
7	CRANE - LORAINE/NATIONAL TR: AFOSH 91-46; TOs 35D36-1-102, 35D36-2-2; LJG 20AF-95-002; Applicable Manufacturer's Operation and Service Instructions						
7a	Inspect						
7b	Repair components						
7c	Troubleshoot components						
7d	Proofload						
8	VEHICLE AND EQUIPMENT CONTROL TR: AFSPCI 21-0114						
8a	Perform preoperational checkout of						
8a(1)	Payload Transporter (PT) TR: TOs 21M-LGM30G-2-33, 36A9-8-49-1, 36A9-8-58-1						
8a(2)	Mechanical Maintenance Truck TR: TOs 21M-LGM30G-2-10 (-1), 35D4-7-4-2, 36A12-24-3-1; LJG 20AF-95-001						
8a(3)	Missile Guidance and Control Set Support Truck TR: TOs 21-LG118A-2-10, 21-LG118A-2-34, 36A13-31-1						
8a(4)	Periodic Maintenance Van TR: TO 36A9-8-56-1						
8b	Operate hoist in						
8b(1)	Payload Transporter TR: TOs 21M-LGM30G-2-33, 36A9-8-49-1, 36A9-8-58-1						
8b(2)	Mechanical Maintenance Truck TR: TOs 21-LG118A-2-10, 21M-LGM30G-2-10 (-1), 35D4-7-4-2, 36A12-24-3-1; LJG 20AF-95-001						
8b(3)	Missile Guidance and Control Set Support Truck TR: TOs 21-LG118A-2-10, 21-LG118A-2-34, 36A13-31-1						
8b(4)	Periodic Maintenance Van TR: TO 36A9-8-56-1						
8c	Forms/records TR: TOs 00-20-1, 00-20-2, 00-20-5, 00-20B-5, 00-25-245, 36-1-58						
8c(1)	Initiate						
8c(2)	Maintain						
8d	Vehicles						
8d(1)	Perform daily inspections of TR: AFI 24-301						
8d(1a)	General purpose vehicles TR: TO 36-1-23						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
8d(1b)	Special purpose vehicles TR: TOs 36A9-8-49-1, 36A9-8-58-1, 36A12-24-3-1, 36A13-31-1						
8d(2)	Track vehicle status/location						
8d(3)	Schedule vehicles for inspection/repair						
8e	Equipment						
8e(1)	Store/Issue equipment						
8e(2)	Track equipment status/location						
8f	Nitrogen bottles TR: TOs 35M1-1-101, 42B5-1-1-2						
8f(1)	Install in purge manifold						
8f(2)	Remove from purge manifold						
8f(3)	Drain						
8g	Perform self test on						
8g(1)	Explosive set circuitry test set TR: TO 33D9-38-15-21						
8h	Configure vehicles with equipment for the following: TR: Applicable weapon system TO; configuration load lists						
8h(1)	MMT dispatches						
8h(2)	EMT dispatches						
8h(3)	FMT dispatches						
8h(4)	PNEU dispatches						
8i	Equipment recovery TR: TOs 00-25-234, 00-24-245, 1-1A-8, 11N-HRV-5022-2						
8i(1)	Inspect equipment						
8i(2)	Repair equipment						
8i(3)	Process equipment						
9	TRAINER MAINTENANCE OPERATION						
9a	Launch Facility trainer (AN/GSQ-T8 and AN/GSQ-T9) TR: TO 43D2-3-27-1						
9a(1)	Perform startup, shutdown, emergency shutdown, and startup after inadvertent shutdown						
9a(2)	Perform inspection and lubrication of trainer						
9a(3)	Perform checkout, trouble analysis and repair of the following trainer unique equipment						
9a(3a)	Security system						
9a(3b)	OGE power and systems						
9a(3c)	Communication system						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
9a(3d)	Instructor control panel						IMITALO
9a(3e)	Ground G&C liquid cooling system						
9a(3f)	Distribution box						
9a(3g)	Simulated environmental control system						
9b	Launch Facility trainer (AN/GSQ-T10, AN/GSQ-T13, and AN/GSQ-T41) TR: TOs 43D2-3-55-1, 43D2-3-81-1						
9b(1)	Perform startup, shutdown, emergency shutdown, and startup after inadvertent shutdown						
9b(2)	Perform inspection and lubrication of trainer						
9b(3)	Perform checkout, trouble analysis and repair of the following trainer unique equipment						
9b(3a)	Security system						
9b(3b)	OGE power and systems						
9b(3c)	Communication system						
9b(3d)	Instructor control panel						
9b(3e)	Ground G&C liquid cooling system						
9b(3f)	GMSR system						
9b(3g)	Distribution box						
9c	Launch Facility trainer (A/F 24A-T2) TR: TOs 43D2-10-3-1, 43D2-10-3-2						
9c(1)	Inspect trainer						
9c(2)	Repair trainer						
9c(3)	Lubricate trainer						
9c(4)	Perform startup, shutdown and emergency shutdown						
9d	Launch Facility operational support equipment (AF 24A-T4) TR: TOs 43D2-10-3-1, 43D2-10-3-2						
9d(1)	Inspect						
9d(2)	Repair						
9d(3)	Perform startup, shutdown and emergency shutdown						
9e	Training guided missile set (A/E37A-T47) TR: TO 43D2-3-18-1						
9e(1)	Perform checkout, trouble analysis, and repair of trainer						
9e(2)	Perform inspections						
9f	Perform checkout, trouble analysis, and repair of code change verifier set (AN/DJW-36T1A) TR: TO 43D2-3-18-1						
9g	Missile Guidance Set trainer (AN/DJW-36T1) TR: TO 43D2-3-73-1						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
9g(1)	Perform checkout, trouble analysis, and repair						INITIALS
9g(2)	Perform inspections						
9h	Propulsion system rocket engine trainer (A/A44A-4T1) TR: TO 43D2-3-72-1						
9h(1)	Perform checkout, trouble analysis, and repair						
9h(2)	Perform inspections						
9i	Control monitor procedures trainer (AN/GSQ-T46/T47/T48/T49) TR: TO 43D2-3-93-1						
9i(1)	Operate trainer						
9i(2)	Perform installation, adjustment, checkout, trouble analysis, inspection, and repair						
9j	Environmental control system/power procedures trainer (A/F37FU-T19/T22/T24/T25) TR: TOs 43D2-3-84-1, 43D2-3-89-1, 43D2-3-91-1 43D2-3-92-1						
9j(1)	Perform startup, shutdown, and emergency shutdown						
9j(2)	Perform checkout, trouble analysis, repair, adjustment, and inspection of the following trainer unique equipment						
9j(2a)	Instructor control panel						
9j(2b)	Intercommunication system						
9j(2c)	Load bank						
9j(2d)	Simulated electronic rack						
9j(2e)	DC power supply PS-500						
9j(2f)	Transfer control panel						
9j(3)	Perform checkout trouble analysis, repair, adjustment, and inspection of trainer unique circuitry/mechanical devices						
9k	Perform checkout, trouble analysis, and repair of Minuteman III reentry system trainer (A/E32U-T4) TR: TO 43D2-3-67-1						
91	Missile guidance and control set (P/N 14900-201-1) TR: TO 43D32-2-3-1						
9l(1)	Inspect						
91(2)	Repair						
9m	Operate digital computer system model PC380-AA TR: TOs 43D2-10-3-1, 43D2-10-3-2						
9n	Sump pump trainers, Minuteman/Peacekeeper (A/F 374-T25) TR: TOs 43D2-3-84-1, 43D2-3-92-1, 43D2-3-97-1; CEM 21-SM80X-2-24-X						
9n(1)	Inspect/operate						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
9n(2)	Perform checkout						
9n(3)	Troubleshoot						
9n(4)	Repair						
90	Third Stage Trainer TR: TO 21MLGM30F-2-17-5						
90(1)	Checkout						
90(2)	Troubleshoot						
90(3)	Repair						
90(4)	Inspect						
9p	Operate Code Change Verifier Simulator (SM-876/G) TR: TO 43D2-3-18-1						
10	QUALITY ASSURANCE						
10a	Technical data TR: AFPD 21-3; TOs 00-5-1, 00-5-2; AFSPCIND7; AFSPCIs 21-0108, 21-0114, 32-1005, 32-1009; ACCI 21-101						
10a(1)	Review/process AFTO Forms 22 and AFSPC Forms 272						
10a(2)	Review all new and revised technical data and standard publications for completeness and technical accuracy						
10a(3)	Review supplements and maintenance OIs for accuracy, intent, and necessity						
10b	TCTO, MCLs, and modifications TR: AFSPCIs 21-0108, 21-0114; ACCI 21-101						
10b(1)	Review for applicability, training, supplies, and equipment requirements						
10b(2)	Determine sampling size and perform random inspections						
10b(3)	Conduct final review of TCTO/MCLs submitted by Logistics Group						
10c	Management inspections TR: AFSPCIs 21-0108, 21-0114; ACCI 21-101						
10c(1)	Conduct activity inspections						
10c(2)	Conduct special inspections						
10d	Hardware inspections TR: AFSPCIs 21-0114						
10d(1)	Conduct hardware equipment inspection						
10d(2)	Conduct hardware acceptance inspection						
10e	Proficiency evaluations TR: AFSPCIs 21-0108, 21-0114						
10e(1)	Conduct personnel proficiency evaluations						
10e(2)	Conduct proficiency verification evaluations						
10e(3)	Conduct trainer proficiency evaluations						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
10f	Evaluation/Inspection reports TR: AFSPCIs 21-0108, 21-0114; ACCI 21-101						
10f(1)	Document evaluations/inspections						
10f(2)	Prepare evaluation/inspection reports						
10g	Evaluate deferred discrepancies TR: AFSPCIs 21-0114						
10h	Training TR: AFSPCI 21-0114						
10h(1)	Conduct MEP orientation course						
10h(2)	Conduct DR course						
10h(3)	Conduct production inspector course						
10h(4)	Conduct technical data course TR: TOs 00-5-1, 00-5-2						
10i	Deficiency Reporting TR: AFMAN 23-110; TO 00-35D-54						
10i(1)	Identify deficiencies						
10i(2)	Process deficiency reports						
11	MISSILE MAINTENANCE OPERATIONS CENTER (MMOC)						
11a	Understand security enhancement procedures and site security procedures TR: AFSPCIs 21-0114, 31-1101						
11b	Use the maintenance priority system TR: AFSPCI 21-0114						
11c	Accept, evaluate, and respond to reports from LFs/MAFs TR: TOs 21-LG118A-2-1, 21M-LGM30X-2-1-X; AFSPCI 21-0114						
11d	Monitor, update, and delete maintenance data for priorities 1–4 TR: AFSPCI 21-0114						
11e	Coordinate with Material Control on priority changes, PMCS, NMCS, and MICAP conditions TR: AFSPCI 21-0114						
11f	Coordinate and document maintenance on and off base TR: AFSPCI 21-0114						
11g	Coordinate unscheduled dispatches TR: AFSPCI 21-0114						
11h	Monitor critical equipment and vehicle status TR: AFSPCI 21-0114						
11i	Coordinate and document cannibalization procedures TR: TO 00-2-2; AFSPCI 21-0114						
11j	Perform EWO actions TR: AFSPCI 21-0114; SRR OPLAN 55; Local wing OPLANs						
11j(1)	Senior controller						
11j(2)	Weapons system controller						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
11k	Use procedural, situational, and EWO checklists to TR: AFSPCI 21-0114						
11k(1)	Coordinate disaster response actions TR: Local OPLAN directive						
11k(2)	Coordinate movement of and emergency procedures for						
11k(2a)	Stage IV TR: Local OPLAN directive						
11k(2b)	PSRE TR: Local OPLAN directive						
11k(2c)	Reentry Systems TR: AFSPCI 31-1101; Local OPLAN directive						
11k(2d)	Missile TR: Local OPLAN directive						
11k(3)	Perform actions in support of Missile Potential Hazard (MPH) conditions TR: AFSPCI 21-0114						
111	Coordinate with BCE on RPIE maintenance requirements and interruptions of normal commercial power TR: AFSPCIs 21-0114, 32-1005						
11m	Coordinate and document airborne launch and control systems tests TR: TOs 21-LG118A-2-1, 21M-LGM30X-2-1-X; AFSPCI 21-0114; ALCC Log						
11n	Coordinate and document code change action TR: TOs 21-LG118A-2-1, 21M-LGM30G-2-1-X; AFSPCIs 21-0114, 91-1005						
110	Perform actions required of severe weather, snow, ice, and flood control plans TR: Local OPLAN directives						
11p	Perform support battle staff maintenance duties TR: Local OPLAN directives						
11q	Report wing status TR: AFI 21-103; MCR 55-8; AFSPCIs 21-0103, 21-0114						
11r	Use STU III TR: Operating Manual						
12	PLANS AND SCHEDULING TR: AFSPCI 21-0114						
12a	Planning						
12a(1)	Plan, coordinate, and compile maintenance forecasts						
12a(2)	Plan and coordinate						
12a(2a)	SELM/SELP						
12a(2b)	Code change						
12a(2c)	TCTO/MCL modification program						
12a(2d)	EWO generation meeting						

12a(2f) RIV 12a(2g) Per 12b Sch 12b(1) Plai equ 12b(2) Coc Ope reqi 12b(3) Dev 12b(4) Cor 13 Brie wea 13a(1) On 13a(2) Disi 13b Det info 13b(1) On 13b(2) Disi	eriodic maintenance program VET Mile programs erform AVDO Functions			
12a(2g) Per 12b Sch 12b(1) Plai equi 12b(2) Coc Ope req 12b(3) Dev 12b(4) Cor 13 BRi TR: 13a Brie wea 13a(1) On 13a(2) Disi 13b Det info 13b(1) On 13b(2) Disi	,			INITIALS
12b Sch 12b(1) Plan equi 12b(2) Coc Ope requi 12b(3) Dev 12b(4) Cor 13 BR/ TR: 13a Brie wea 13a(1) On 13a(2) Dis 13b Det info 13b(1) On 13b(2) Dis	erform AVDO Functions			
12b(1) Plai equipal eq				
equi 12b(2) Coo Ope requi 12b(3) Devi 12b(4) Cor 13 BRi TR: 13a Brie wea 13a(1) On 13a(2) Disjustification on 13b(1) On 13b(2) Disjustification on 13b(2) Disjustification on 13b(2) Disjustification on 13b(2) Disjustification of 12b(2) Disjustification on 12b(2) Disjustification of 12b(2) Di	cheduling			
Operequipment of the property	an and schedule the use and maintenance of vehicles and quipment			
12b(4) Cor 13 BR TR: 13a Brie wea 13a(1) On 13a(2) Dis 13b Det info 13b(1) On 13b(2) Dis	pordinate jobs in conjunction with Missile Maintenance perations Center (MMOC) using appropriate work center quirements			
13 BR TR: 13a Brie west 13a(1) On 13a(2) Disposition 13b Debinfo 13b(1) On 13b(2) Disposition	evelop daily work packages			
13a Brie wea 13a(1) On 13a(2) Dis 13b Det info 13b(1) On 13b(2) Dis	onduct daily scheduling meetings			
wea 13a(1)	RIEFING/DEBRIEFING R: AFSPCI 21-0114			
13a(2) Dispose 13b Detainfo 13b(1) On 13b(2) Dispose 13a(2) Dispos	rief work packages, site discrepancies, current road and eather conditions, and related information to			
13b Det info 13b(1) On 13b(2) Dis	n base shop personnel			
info 13b(1) On 13b(2) Disp	spatching personnel/teams			
13b(2) Dis	ebrief work packages, site discrepancies, and related formation from			
	n base shop personnel			
13c Ass	spatching personnel/teams			
	ssign, verify, and change maintenance priorities using the aintenance priority system			
13d For	prward LF site inspections and inventory forms to the proper gencies for review			
13e Mai	aintain currency of record copy of Site Workload equirements/ Equipment Workload Requirements			
	erform SWR/EWR reconciliations with applicable agencies			
14 TE	ECHNICAL ENGINEERING			
othe TR: tec Ine	se technical data, special drawings, engineering data, and her data as applicable R: Special contractor data; depot instructions; CE chnical data; "as built" drawings; engineering data; ertial Performance Data (IPD); Launch Facility Activity ata (LFAD)			
14b Cor	onduct engineering studies R: Applicable technical data; AFSPCI 21-0114			
14c Eva	valuate applicable Engineering Change Proposals (ECPs) and Facility Change Proposals (FCPs) R: Applicable technical data; AFSPCI 21-0114			
14d Per effe	erform technical assistance and/or analysis for system fectiveness R: Applicable technical data			

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
14e	Perform technical engineering EWO planning duties TR: Local directives						
14f	Perform Disaster Control Group Team duties TR: Local O-Plan directives						
14g	System anomalies TR: Applicable technical data						
14g(1)	Troubleshoot						
14g(2)	Use special engineering test equipment						
14g(3)	Document faults and dispatches						
15	TO LIBRARY TR: RM 1103						
15a	Maintain and generate products from ATOMS data base						
15b	Process and control technical order, CEM, and CPIN distribution						
15c	Maintain initial distribution requirements						
15d	Perform routine, annual, and other required checks						
15e	Post TO						
15e(1)	Revisions						
15e(2)	Changes						
15e(3)	Supplements						
15e(3a)	Safety						
15e(3b)	Operational						
15e(3c)	Routine						
15e(3d)	TOPS						
15e(3e)	ITPS						
15e(3f)	TOFCN/VB pages						
15f	Post CEM						
15f(1)	Revisions						
15f(2)	Changes						
15f(3)	CEMICs						
15g	A-Page TO, CEM						
15h	Maintain task documents						
15h(1)	Revision and supplements						
15h(2)	RM 150 Change requests						
15h(3)	RM 150 logs						
15i	Maintain other support documents						
15i(1)	CPIN						

ITEM#	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
15i(2)	Task requirement documents						
15i(3)	Task flow documents						
15j	Issue/sign-in TO, CEM, and dispatch kits						
16	MAINTENANCE PROGRAMS TR: AFIS 38-101, 38-201; AFSPCI 21-0114						
16a	Manpower						
16a(1)	Monitor adequacy of assigned and authorized positions						
16a(2)	Advise maintenance managers of overall manpower positions						
16a(3)	Initiate manpower change requests						
16b	Mission Support Equipment (MSE) TR: AFMAN 23-110						
16b(1)	Monitor authorized and assigned MSE						
16b(2)	Ensure MSE is requisitioned by the appropriate custodian						
16b(3)	MSE allowance authorization change request						
16b(3a)	Review, evaluate, and coordinate						
16b(3b)	Approve/Disapprove						
16b(4)	Complete allowance document files						
16b(5)	Plan and accomplish acquisition/deletion of MSE for system modifications						
16b(6)	Assist equipment custodians						
16b(7)	Monitor Maintenance Complex CA/CRLs						
16c	Facility management						
16c(1)	Manage facility program						
16c(2)	Monitor and act upon requests for new/additional facilities or alterations of existing facilities						
16c(3)	Coordinate with work centers						
16d	Resource management						
16d(1)	Monitor and control expenditure of funds						
16d(2)	Plan and budget for financial requirements						
16d(3)	Add financial requirements to long range plans						
16e	OPLAN monitor						
16e(1)	Develop, coordinate, and distribute OPLANs within the maintenance complex						
16e(2)	Coordinate and review						
16e(2a)	OPLANs from outside agencies						
16e(2b)	Feasibility studies						
16e(2c)	Host-tenant and Interservice Support Agreements						

ITEM #	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
16f	Review/Update/Maintain LG Battle Staff checklists						INITIALS
17	ICBM CODES VAULT						
17a	Lock/Alarm class A vault door TR: AFI 31-209; TO 00-20F-2; SD 501-12; AFSPCI 91-1005						
17b	Maintain security of division containers, locks/combinations TR: AFPD 31-1, 31-4; AFI 31-401; SD 501-12						
17c	Maintain visitor control TR: SD 501-12; AFMAN 37-139; AFSPCI 91-1005						
17d	Maintain code controller operations records TR: SD 501-12; AFSPCI 91-1005						
17e	Comply with system control/requirements for TR: SD 501-12; AFSPCI 91-1005						
17e(1)	WCPS						
17e(2)	20 year spares						
17e(3)	HCVE						
17e(4)	Master tapes/cartridges/discs						
17e(5)	LCP/keys						
17e(6)	LECG/EP (WS118A)						
17e(7)	LEP						
17e(8)	CCV/CSD(M)						
17e(9)	CCV/SCD (WS118A)						
17e(10)	P Plug						
17e(11)	KVP (WS118A)						
17e(12)	LFLC						
17e(13)	MCLC/LCLC/KCLC (WS118A)						
17e(14)	LFOC/Pen D LFLC						
17e(15)	WSC/MCG Pen C/D Tapes (WS118A)						
17e(16)	Encryption System components						
17e(17)	Program tapes/cartridges/discs						
17e(18)	Target materials and execution plans TR: AFI 10-1102						
17e(19)	WSC (WS118A)						
17e(20)	MCG (WS118A)						
17e(21)	LVP/COOP panel/keys (WS118A)						
17e(22)	TDIs						
17e(23)	CSD(G)						
17e(24)	IMU tapes						
17e(25)	GRP MGS Parameters data						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
17e(26)	MGCS parameter tapes (WS118A)						INITIALS
17e(27)	CTU (C631A)						
17e(28)	LCSC (WS118A)						
17e(29)	LCMU (WS118A)						
17e(30)	Tape transport (C-164A)						
17e(31)	MCU						
17e(32)	MGS computer						
17e(33)	MGC Computer (GRP)						
17e(34)	MGCS computer (WS118A)						
17e(35)	WCPS computer						
17e(36)	Sumcheck controls						
17e(37)	Off base training LF						
17e(38)	Test components						
17e(39)	Code change procedures						
17e(40)	SELM						
17e(41)	SELP (WS118A)						
17e(42)	Encryption PROMS						
17e(43)	Failed WCPS components						
17e(44)	WCPS APM (KIV-42) (WS118A)						
17e(45)	LF APMs (KIV-42) (WS118A)						
17e(46)	WSP						
17e(47)	SIOP unlock code change						
17f	Documentation						
17f(1)	TR: AFIs 33-322, 37-138; SD 501-12; AFSPCI 91-1005 Establish and maintain files						
17f(2)	File and locate records						
17f(3)	Classify and control records						
17f(4)	Maintain component control records						
17f(5)	Maintain WCPS operation records						
17f(6)	Maintain receipt/disposition records						
17g	Follow emergency procedures for						
17g(1)	Possible Code Compromise (PCC) TR: SDs 501-11, 501-12; AFSPCI 91-1005						
17g(2)	Two-person concept violations TR: AFIs 91-101, 91-104						
17g(3)	Single flight/ECC TR: AFI 91-114; SD 501-11						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
17g(4)	Lateral coding TR: SD 501-11						
17g(5)	Emergency evacuation/destruction TR: SD 501-11						
17g(6)	Violations of code handling procedures TR: SDs 501-11, 501-12; AFSPCI 91-1005						
17g(7)	Possible compromise to Tamper Detection Indicator (TDI) technology TR: SDs 501-11, 501-12;, AFSPCI 91-1005						
17h	Code components, programs, and misc. materials TR: SD 501-12; AFSPCI 91-1005						
17h(1)	Receipt for materials						
17h(2)	Store materials						
17h(3)	Inventory materials						
17h(4)	Dispose of materials						
17h(5)	Transfer materials						
17h(6)	Select and assign materials for						
17h(6a)	WCPS use only						
17h(6b)	Squadron use						
17h(6c)	LCC use						
17h(6d)	LF use						
17h(7)	Monitor availability of materials						
17h(8)	Identify, classify, and mark materials TR: AFI 31-401						
17i	Field requirements TR: SD 501-12; AFSPCI 91-1005						
17i(1)	Operational/test code configuration						
17i(1a)	Monitor code requirements/status						
17i(1b)	Coordinate job requirements						
17i(1c)	Maintain work status boards						
17i(2)	Team dispatch/recovery TR: SD 501-12; AFSPCI 91-1005						
17i(2a)	Prepare materials/equipment for issue						
17i(2b)	Identify and brief team						
17i(2c)	Apply issue restrictions						
17i(2d)	Recover materials						
17i(3)	Status of Field Teams						
17i(3a)	Monitor transport of material						
17i(3b)	Monitor transfer of material						
17i(3c)	Monitor field storage of material						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
17i(3d)	Monitor installation of materials						INTIALS
17i(3e)	Validate CMSC from LF						
17i(3f)	Validate VN from LF						
17i(3g)	Validate WSC/MCG CMCC from LCC						
17i(3h)	Install/inspect/remove TDIs						
17j	Equipment configuration TR: TO 31X8-2-2-1						
17j(1)	Load/unload MTC						
17j(2)	Load/unload punched mylar tape						
17j(3)	Install/remove LECG test adapter						
17j(4)	Install/remove LECG/EP						
17j(5)	Install/remove LEP						
17j(6)	Install/remove MCU and reset tamper mechanism						
17j(7)	Install/remove MCU (MCU encoder)						
17j(8)	Install/remove C-164A tape transport						
17j(9)	Install/remove WSC test adapter						
17j(10)	Install/remove WSC processor drawer (WS118A)						
17j(11)	Install/remove WSC memory drawer (WS118A)						
17j(12)	Install/remove MCG test adapter						
17j(13)	Install/remove MCG controller-synchronizer (WS118A)						
17j(14)	Install/remove MCG drum (WS118A)						
17j(15)	Degauss MTC/7-track/9-track magnetic tape TR: TO 31X8-2-2-1						
17j(16)	Install/remove CSD(G) test adapter						
17j(17)	Install/remove CSD(G) (Code verifier)						
17j(18)	Apply 7/9-track magnetic tape BOT/EOT markers						
17j(19)	Load/place on-line /unload 7/9-track magnetic tape						
17j(20)	Install/remove LCP verifier/test adapter						
17j(21)	Install/remove P Plug test adapter TR: TO 31X8-2-2-2						
17j(22)	Install/remove KVP test adapter TR: TO 31X8-2-2-2						
17j(23)	Install/remove removable disc						
17j(24)	Load KG84A						
17j(25)	Load/adjust/unload printer paper						
17j(26)	Load/remove printer ribbon cartridge						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
17k	Equipment checkout TR: TO 31X8-2-2-1						
17k(1)	Clean CTU read/write head						
17k(2)	Inspect MTC						
17k(3)	Condition MTC						
17k(4)	Inspect/clean CDU, CTU, LCMU, 7/9 track read head and lamp aperture						
17k(5)	Clean MTU tape deck						
17k(6)	Perform CCV self test						
17k(7)	Perform MCU functional test TR: TO 31X8-2-2-1						
171	Shielded enclosure TR: TO 31X8-2-2-1						
171(1)	Perform SE visual inspection						
171(2)	Perform SE fire alarm test						
171(3)	Perform SE environmental test						
171(4)	Perform SE air pressure and door seal test						
17I(5)	Perform SE communications test						
17m	WCPS power TR: TO 31X8-2-2-1						
17m(1)	Start-up WCPS - normal start procedure						
17m(2)	Start-up WCPS - cold start procedure						
17n	CCOS executive functions TR: TOs 31X8-2-2-1, 31X8-2-2-2						
17n(1)	Perform						
17n(1a)	Computer subsystem test						
17n(1b)	CRT/keyboard terminal test						
17n(1c)	Power supplies/ADC test						
17n(1d)	Disc assembly test						
17n(1e)	Line printer test						
17n(1f)	Tape transport test						
17n(1g)	Cartridge drive unit test						
17n(1h)	9-track MTU test						
17n(1i)	KVP interface test						
17n(1j)	7-track MTU test						
17n(1k)	Isolation circuit test						
17n(1l)	Digital clock test						
17n(1m)	KG84A/modem comm link test						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
17n(1n)	P-Plug adapter test						INITIALS
17n(1o)	MCU encoder test						
17n(1p)	Force mod/Peacekeeper LCP test						
17n(1q)	Wing IX LCP test						
17n(1r)	LECG interface test						
17n(1s)	CSD(G) interface test						
17n(1t)	KIV-42 interface test						
17n(1u)	KI-22 interface test						
17n(1v)	MCG interface test						
17n(1w)	CCV interface test						
17n(1x)	MSD/L interface test						
17n(1y)	WSC interface test						
17n(1z)	REACT BS/L test						
17n(1aa)	REACT FDD test						
17n(1ab)	Self test						
17n(1ac)	End item load						
17n(2)	Display equipment status						
17n(3)	Display/reset log file						
17n(4)	Pack system disc						
17n(5)	Prepare new disc						
17n(6)	Display disc ID						
17n(7)	Transmit data via link						
17n(8)	Receive data via link						
17n(9)	Edit link control files						
17n(10)	Perform manual record keeping						
17n(11)	Relog (change operator)						
17n(12)	Prepare PVS backup tape						
17n(13)	Verify DC300 program copies						
17n(14)	Verify 9-track program copies						
17n(15)	Select commanded overwrite						
17n(16)	Perform media to media conversion						
17n(17)	Log off (exit) systems						
17n(18)	Inhibit operator input print						
17n(19)	Enable operator input print						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
17n(20)	Perform console shutdown						INITIALS
17n(21)	Change KI-22 keying variable						
17n(22)	Initialize REACT BS/L HDA						
17n(23)	Verify reel to reel tape copies						
17n(24)	Enable telephone						
17n(25)	Convert 9-track to 7-track tapes						
17n(26)	Backup system disk						
17n(27)	Format disc in data drive						
17n(28)	Execute all tests						
170	Display main menu (WMAP/WPAP) TR: TO 31X8-2-2-1						
17p	Accomplish master data control (WMAP/WPAP) TR: TO 31X8-2-2-1						
17p(1)	Load A/B cartridge						
17p(2)	Change ITSC pen data						
17p(3)	Load pen data						
17p(4)	Load wing code disc						
17p(5)	Perform KI-22 key change						
17p(6)	Assign pen data to LCF						
17p(7)	Assign pen data to LF						
17p(8)	Display master data						
17p(9)	Load/delete P-Plug						
17p(10)	Rekey KIV-42 (WS118A)						
17p(11)	Assign L prime data (WS118A)						
17p(12)	Load L prime data (WS118A)						
17p(13)	Load F data (WS118A)						
17p(14)	Load/delete KVP (WS118A)						
17p(15)	Load/replenish I code data (REACT)						
17p(16)	Load GRP I code data						
17p(17)	Prepare end item tapes						
17p(18)	Assign GRP I code data to LF						
17q	Establish support data TR: TO 31X8-2-2-1						
17q(1)	Load MM III WS133AM OGP						
17q(2)	Load MM III WS133B OGP (Wing 1X Only)						
17q(3)	Load MM III OFP						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
17q(4)	Load MM III overwrite						INITIALS
17q(5)	Load execution plan						
17q(6)	Load flight constants						
17q(7)	Load OEP						
17q(8)	Load IMU tape						
17q(9)	Load LF offload tapes						
17q(10)	Load GRP OGP/OFP data						
17q(11)	Load GRP MGS parameter data						
17q(12)	Load targeting tape						
17q(13)	Load LF master data						
17q(14)	Load MCG tapes (WS118A)						
17q(15)	Load PK OGP/OFP (WS118A)						
17q(16)	Load mission parameters (WS118A)						
17q(17)	Load MGCS parameters (WS118A)						
17q(18)	Load launch control program (WS118A)						
17q(19)	Load POEP tapes (WS118A)						
17q(20)	Load REACT MAF tapes						
17q(21)	Load GRP flight programs constants data						
17r	Generate and verify data (WMAP/WPAP) for TR: TO 31X8-2-2-1						
17r(1)	MCG Pen C/D tape (WS118A)						
17r(2)	Fixed data cartridge						
17r(3)	LFLC variable data						
17r(4)	Complete load LFLC (GRP)						
17r(5)	Code change LFLC (GRP)						
17r(6)	Pen D LFLC (GRP)						
17r(7)	LFOC variable data						
17r(8)	Wing code disk						
17r(9)	MECA LFLC (WS118A)						
17r(10)	Keys/codes LFLC (WS118A)						
17r(11)	LCSC LFLC (WS118A)						
17s	Perform the sum checks (WMAP/WPAP) TR: TO 31X8-2-2-1						
17s(1)	MM CMSC						
17s(2)	GRP CMSC						
17s(3)	WSC CMCC						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
17s(4)	MCG CMCC						INITIALS
17s(5)	LCSC CMSC (WS118A)						
17s(6)	MECA CMSC (WS118A)						
17s(7)	Keys/codes CMSC (WS118A)						
17t	Encode and verify devices (WMAP/WPAP) TR: TO 31X8-2-2-1						
17t(1)	Encode and verify LECG (WS118A)						
17t(2)	Encode and verify LEP						
17t(3)	Encode and verify LCP						
17t(4)	Encode and verify CCV						
17t(5)	Perform CCV trace data functions						
17t(6)	Verify CSD(G)						
17t(7)	Encode MCU with maintenance code						
17t(8)	Encode SCD (WS118A)						
17u	Data verification TR: TO 31X8-2-2-1						
17u(1)	Perform selective enable verification (WS118A)						
17u(2)	Perform launch verification						
17v	Verify only data functions TR: TO 31X8-2-2-1						
17v(1)	Verify MCG Pen C/D tapes (WS118A)						
17v(2)	Verify fixed data cartridges						
17v(3)	Verify LFLC variable data						
17v(4)	Verify GRP complete load LFLC						
17v(5)	Verify GRP code change LFLC						
17v(6)	Verify GRP Pen D LFLC						
17v(7)	Verify LFOC variable data						
17v(8)	Verify wing code disk						
17v(9)	Verify LECG (WS118A)						
17v(10)	Verify LEP						
17v(11)	Verify MECA LFLC (WS118A)						
17v(12)	Verify keys/codes LFLC (WS118A)						
17v(13)	Verify LCSC LFLC (WS118A)						
17w	Display tape ID (WMAP/WPAP) TR: TO 31X8-2-2-1						
17w(1)	Display wing code disk ID						
17w(2)	Display A/B cartridge ID						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
17w(3)	Display WSC/MCG pen tape ID						INTIALS
17w(4)	Display DC300 cartridge ID						
17w(5)	Display MECA LFLC ID (WS118A)						
17w(6)	Display keys/codes LFLC ID (WS118A)						
17w(7)	Display LCSC LFLC ID (WS118A)						
17x	Load and verify devices (REACT) TR: TO 31X8-2-2-1						
17x(1)	Initialize LCF BS/L HDA						
17x(2)	Load/verify LCF BS/L HDA						
17x(3)	Perform LCF BS/L HDA backout CMSC						
17x(4)	Load/verify LCF diskettes						
17x(4a)	Code change diskette						
17x(4b)	EPP/MA database diskette						
17x(4c)	FDM format database diskette						
17x(4d)	TCI/EPCI diskette						
17y	Load WSC (WMAP/WPAP) TR: TO 31X8-2-2-1						
17z	Load and initialize MCG (WMAP/WPAP) TR: TO 31X8-2-2-1						
17aa	Respond to unsuccessful sum checks TR: TO 31X8-2-2-1						
17aa(1)	Perform MM CMSC backout procedures						
17aa(2)	Perform GRP CMSC backout procedures						
17aa(3)	Perform MM CMCC backout procedures						
17aa(4)	Perform PK CMCC, CMSC backout procedures						
17aa(5)	Respond to unsuccessful VNs TR: SD 501-12, AFSPCI 91-1005						
17ab	Equipment malfunctions TR: TOs 31X8-2-2-1, 31X8-2-2-2						
17ab(1)	Perform corrective actions						
17ab(2)	Restart 7/9-track after power failure						
17ab(3)	Perform WCPS emergency shutdown						
17ab(4)	Perform KG84A emergency operations						
17ab(5)	Perform SCD code erase procedure (WS118A)						
17ac	Administrative communications management TR: AFI 10-1102, 31-401; AFMAN 33-326; AFKAG-3H; SD 501-12; AFSPCI 91-1005						
17ac(1)	Process official incoming/outgoing communications						
17ac(2)	Process, protect, and destroy classified information						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
17ac(3)	Apply classification markings						
17ac(4)	Handle/store/account for classified materials						
17ac(5)	Document/package/process package for courier/classified shipments						

ITEM#	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
1	LAUNCH FACILITY, MISSILE ALERT FACILITY AND SUPPORT BASE FACILITIES						INTIALO
1a	Launch facility (LGM-30) TR: TO 21M-LGM30G-2-10 (-1), 21M-LGM30X-2-7-X, 21M-LGM30F-2-17-9, 21M-LGM30G-2-28-X						
1a(1)	Enter LER	5					
1a(2)	Enter LSB/LEB	5					
1a(3)	Enter launch tube						
1a(4)	Perform emergency shutdown						
1a(5)	Evacuate launch facility for EWO launch conditions						
1a(6)	Follow emergency procedures for electrical isolation of LSB/LEB						
1a(7)	Lower equipment						
1a(8)	Raise equipment						
1a(9)	Exit LER	5					
1a(10)	Exit LSB/LEB	5					
1a(11)	Exit launch tube						
1a(12)	Perform hostile LF securing						
1a(13)	Perform SP102/601 inspection (Launch Tube water check) TR: CEM 21-SM80B-2-24-2, 21-SM80-6						
1a(14)	LF Diesel Start-up WS133 AMCDB						
1a(15)	LF Diesel Start-up WS133 BMCDB						
1a(16)	LF ECS Brine Chiller Restart (WS133A system)						
1a(17)	LF ECS Brine Chiller Restart (WS133B system)						
1b	Personnel access system TR: TO 21M-LGM30F-2-19, 21M-LGM30G-2-10 (-1), 35M1-9-2-2						
1b(1)	Inspect						
1b(2)	Service						
1b(3)	Hand driven linear actuator						
1b(3a)	Remove and replace						
1b(3b)	Repair						
1b(4)	Secondary door						
1b(4a)	Perform checkout						
1b(4b)	Adjust components						
1b(4c)	Repair						
1b(5)	Electromechanical linear actuator						
1b(5a)	Perform checkout						
1b(5b)	Adjust actuator						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
1b(5c)	Repair						
1b(6)	Security Pit, perform electrical test						
1b(7)	Security pit vault door						
1b(7a)	Repair						
1b(7b)	Troubleshoot						
1b(8)	Telescoping ladder						
1b(8a)	Inspect						
1b(8b)	Repair						
1c	Blast doors TR: TO 21-LG118A-2-28, 21M-LGM30F-112, 21M-LGM30G-2-28-X, 35M-1-101, 35M3-11-2-1, 35M3-11-3-1						
1c(1)	MAF blast doors						
1c(1a)	Inspect components						
1c(1b)	Service components						
1c(1c)	Repair components						
1c(1d)	Perform trouble analysis						
1c(1e)	Perform emergency opening						
1c(1f)	Perform operational checkout						
1c(2)	LF blast doors						
1c(2a)	Inspect components						
1c(2b)	Service components						
1c(2c)	Repair components						
1c(2d)	Perform trouble analysis						
1c(2e)	Perform operational checkout						
1d	Ventilation safety system TR: TO 21-LG118A-2-28, 21M-LGM30X-2-28-X; CEM 21-SM80X-2-26-X						
1d(1)	Missile Alert Facility (MAF)						
1d(1a)	Inspect components						
1d(1b)	Service components						
1d(1c)	Repair components						
1d(1d)	Troubleshoot components						
1d(1e)	Perform operational checkout						
1d(2)	Launch Facility						
1d(2a)	Inspect components						
1d(2b)	Service components						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
1d(2c)	Repair components						
1d(2d)	Troubleshoot components						
1d(2e)	Perform operational checkout						
1e	Shock systems TR: TO 21-LG118A-2-28, 21M-LGM30X-2-28-X, 35M-1-101, 21M-LGM30G-2-30						
1e(1)	Spring type mechanical shock absorber system						
1e(1a)	Inspect components						
1e(1b)	Adjust						
1e(1c)	Repair						
1e(2)	Shock attenuator system						
1e(2a)	Inspect components						
1e(2b)	Adjust						
1e(2c)	Repair						
1e(3)	Pneumatic shock isolator system						
1e(3a)	Inspect components						
1e(3b)	Adjust						
1e(3c)	Perform trouble analysis						
1e(3d)	Repair						
1e(4)	Adjust electrical mechanical base						
1e(5)	Electrical-mechanical base shoring						
1e(5a)	Install/Remove LCC shoring						
1e(5a1)	Install/Remove A-Frame						
1e(5a2)	Install/Remove Pedestal						
1e(5b)	Install/Remove LER shoring						
1e(6)	LCC pneumatic shock absorber air compressor system TR: TO 34Y1-257-1						
1e(6a)	Inspect						
1e(6b)	Service						
1e(6c)	Perform trouble analysis						
1e(6d)	Repair						
1e(6e)	Perform operational checkout						
1e(6f)	Remove/Replace						
1e(6g)	Adjust						
1e(7)	Liquid shock isolator system						
1e(7a)	Inspect						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
1e(7b)	Adjust						
1e(7c)	Service						
1e(7d)	Perform trouble analysis						
1e(7e)	Repair						
1e(7f)	Remove						
1e(7g)	Replace						
1f	Launcher closure TR: TO 21M-LGM30F-112, 21M-LGM30G-2-10-X, 21M-LGM30X-2-28-X, 35M1-1-101, 21M-LGM30F-2-19, 21M-LGM30X-2-18; CEM 21-SM80X-2-24-X, 21-SM80X-2-26-X; 35M-37-4-12, 11A15-1-167-1, 21M-LGM30F-12-1						
1f(1)	Inspect components						
1f(2)	Service components						
1f(3)	Remove components						
1f(4)	Replace components						
1f(5)	Repair components						
1f(6)	Remove ballistic gas generator cartridge						
1f(7)	Install ballistic gas generator cartridge						
1f(8)	Check out ballistic gas generator cartridge						
1f(9)	Open launcher closure	5					
1f(10)	Close launcher closure	5					
1f(11)	Inspect debris system						
1f(12)	Remove debris system						
1f(13)	Replace debris system						
1f(14)	Inspect actuating and locking mechanism						
1f(15)	Remove components of the actuating and locking mechanism						
1f(16)	Install components of the actuating and locking mechanism						
1f(17)	Remove multiplying linkage						
1f(18)	Repair multiplying linkage						
1f(19)	Install multiplying linkage						
1f(20)	Raise launcher closure						
1f(21)	Lower launcher closure						
1f(22)	Perform destructive break-in						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
1g	Missile suspension system TR: TO 21M-LGM30G-2-28-X, 21M-LGM30G-2-30, 21M-LGM30G-2-22; CEM 21-SM80F-2-26-2, 11A15-1-167-1, 21M-LGM30G-2-21, 21M-LGM30G-2-18						
1g(1)	Inspect components						
1g(2)	Service components						
1g(3)	Remove components						
1g(4)	Replace components						
1g(5)	Perform trouble analysis						
1g(6)	Adjust components						
1g(7)	Remove explosive bolts						
1g(8)	Install explosive bolts						
1g(9)	Disconnect ordnance cable						
1g(10)	Connect ordnance cable						
1g(11)	Repair latch assembly						
1h	Umbilicals TR: TO 21M-LGM30G-2-22, 11A15-1-167-1						
1h(1)	Remove components						
1h(2)	Replace components						
1h(3)	Remove upper umbilical						
1h(4)	Install upper umbilical						
1h(5)	Remove lower umbilical						
1h(6)	Install lower umbilical						
1h(7)	Perform trouble analysis						
1h(8)	Connect upper umbilical at the missile						
1h(9)	Disconnect upper umbilical at the missile						
1h(10)	Connect upper umbilical at the D-box	5					
1h(11)	Disconnect upper umbilical at the D-box						
1h(12)	Remove umbilical retraction actuator/cartridge/components						
1h(13)	Install umbilical retraction actuator/cartridge/components						
1h(14)	Perform retraction actuator cartridge checkout						
1h(15)	Remove umbilical plug jumper cable assembly						
1h(16)	Install umbilical plug jumper cable assembly						
1h(17)	Connect skirt umbilical at the missile						
1h(18)	Disconnect skirt umbilical at the missile						
1h(19)	Connect skirt umbilical at the D-box						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
1h(20)	Disconnect skirt umbilical at the D-box						
2	LGM-30 MISSILE AEROSPACE VEHICLE EQUIPMENT (AVE)						
2a	Reentry system TR: 21M-LGM30G-2-33; AFSPCI 31-1101						
2a(1)	Inspect insulation						
2a(2)	Remove						
2a(3)	Install	5					
2a(4)	Checkout warhead monitor loop	5					
2a(5)	Checkout (MK12/MK12A) electrical system	5					
2a(6)	Load	5					
2a(7)	Unload	5					
2a(8)	Handle	5					
2a(9)	Transport TR: AFSPCI 31-1101						
2a(10)	Perform missile startup after RS maintenance						
2a(11)	Install/remove RS simulator						
2a(12)	Prepare RS for Strategic Arms Reduction Treaty (START) inspection						
2a(13)	Perform alternate RS loading/unloading procedures						
2b	Missile Guidance Set (MGS) NS20/NS50 TR: TO 11A15-1-167-1, 21M-LGM30G-2-33, SD501-12 AFSPCI 91-1005						
2b(1)	Inspect insulation						
2b(2)	Repair insulation						
2b(3)	Remove						
2b(4)	Install	5					
2b(5)	Checkout MGS to RS interface cables						
2b(6)	Remove components						
2b(7)	Install components						
2b(8)	Load	5					
2b(9)	Unload	5					
2b(10)	Handle	5					
2b(11)	Transport						
2b(12)	Checkout accidental missile ignition (AM) system						
2c	Propulsion System Rocket Engine (PSRE) TR: TO 21M-LGM30G-2-33, 11A15-1-167-1						
2c(1)	Inspect insulation						
2c(2)	Repair insulation						
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ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
2c(3)	Remove						INTIALO
2c(4)	Install						
2c(5)	Load						
2c(6)	Unload						
2c(7)	Handle						
2c(8)	Transport						
2c(9)	Follow emergency handling procedures						
2d	Postboost Control System (PBCS) TR: TO 21M-LGM30G-2-33, 11A15-1-167-1; AFM 161-30						
2d(1)	Remove						
2d(2)	Install	5					
2d(3)	Load	5					
2d(4)	Unload	5					
2d(5)	Handle	5					
2d(6)	Transport						
2e	Simulated Electronic Launch Minuteman (SELM) TR: 21M-LGM30G-1-17, 21M-LGM30G-1-18						
2e(1)	Posture site for SELM						
2e(1a)	Posture MGS for Battery Bypass/ Ground Power Option						
2e(1b)	Install SCM for Live/ Simulated option						
2e(2)	Reposture site from SELM						
2e(2a)	Reconfigure MGS						
2e(2b)	Umbilical/ Retraction Actuator Restoration/ Replacement						
2e(2c)	Missile Suspension System Restoration						
2e(2d)	Launcher Closure Restoration						
2e(2e)	Remove SCM						
2e(2f)	Enter LER						
2e(2g)	Exit LER						
3	LGM-30 MISSILE TR: TO 1C-141B-9, 21M-LGM30F-2-2-1, 35D3-11-52-2, 21M-LGM30F-2-17-9, 21M-LGM30G-2-22, 33C3-58-1, 21M-LGM30F-2-17-3						
3a	Missile roll transfer operations						
3a(1)	Perform pre-roll transfer procedures for the:						
3a(1a)	TE to MT transfer	5					
3a(1b)	MT to TE transfer	5					

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
3a(2)	Perform roll procedures to transfer missile from the:						INTIALS
3a(2a)	TE to MT	5					
3a(2b)	MT to TE	5					
3a(3)	Follow post-roll procedures for the:						
3a(3a)	TE to MT transfer	5					
3a(3b)	MT to TE transfer	5					
3b	Missile transit procedures						
3b(1)	Follow procedures for storage/handling of the loaded						
3b(1a)	Transporter erector						
3b(1b)	Missile transporter						
3b(2)	Peak acceleration monitor (PAL 2000)						
3b(2a)	Remove						
3b(2b)	Install						
3b(2c)	Monitor						
3b(2d)	Operate						
3b(3)	Perform missile receipt/shipment inspection						
3b(4)	Repair first stage nozzle						
3c	Follow procedures for empty rocket motor carriage handling						
3d	Missile emplacement						
3d(1)	Position and tiedown TE at LF						
3d(2)	Prepare TE for Missile emplacement	5					
3d(3)	Emplace missile (MMT/MHT)						
3d(4)	Prepare TE for travel	5					
3d(5)	Remove TE from pylons/LF						
3d(6)	Follow procedures for emergency missile emplacement						
3d(7)	Inspect insulation on missile downstage						
3d(8)	Repair insulation on missile downstage						
3d(9)	Level missile						
3d(10)	Rotate missile						
3d(11)	Install missile safing pins TR: TO 21M-LGM30G-2-33						
3d(12)	Remove missile safing pins TR: TO 21M-LGM30G-2-33						
3d(13)	Perform sodium chromate/wet missile inspection TR: TO 21M-LGM30G-2-10 (-1)						
3e	Missile removal						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
3e(1)	Position and tiedown TE at LF						INTIALO
3e(2)	Prepare TE for missile removal	5					
3e(3)	Rotate missile						
3e(4)	Remove missile (MMT/MHT)						
3e(5)	Prepare TE and missile for travel	5					
3e(6)	Remove TE from pylons/LF						
3e(7)	Follow procedures for emergency missile removal						
3f	Launcher environmental shelter						
3f(1)	Install the TE to launcher environmental shelter						
3f(2)	Remove the TE to launcher environmental shelter						
3g	Perform the TE/TE support truck/flatbed trailer in route inspection						
3h	Position missile for START						
4	PAYLOAD TRANSPORTER TR: AFSPCI 31-1101; TO 21M-LGM30G-2-33, 36A9-8-49-1, 36A9-8-58-1, 1-1A-8, 33D9-68-30-1, 35D4-2-80-1, 33G1-55-2						
4a	Truck-Tractor						
4a(1)	Preoperational Checkout						
4b	Semitrailer						
4b(1)	Inspect						
4b(2)	Service						
4b(3)	Perform preoperational checkout	5					
4b(4)	Repair						
4c	Auxiliary power unit						
4c(1)	Inspect						
4c(2)	Service						
4c(3)	Operate						
4d	Hoist						
4d(1)	Inspect						
4d(2)	Service						
4d(3)	Operate						
4d(4)	Repair						
4e	Environmental control system						
4e(1)	Operate						
4f	Pneumatic systems						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
4f(1)	Inspect						
4f(2)	Service						
4f(3)	Operate						
4f(4)	Repair						
4f(5)	Troubleshoot						
4g	Security system						
4g(1)	Operate						
4h	Prepare PT van to:						
4h(1)	Load AVE						
4h(2)	Unload AVE						
4h(3)	Temporarily store AVE components						
4h(4)	Transport after temporary storage of AVE components						
4i	PT Van						
4i(1)	Position/stabilize						
4i(2)	Destabilize						
4j(3)	Disconnect tractor from semitrailer						
4i(4)	Connect tractor to semitrailer						
5	TRANSPORTER-ERECTOR TR: TO 21M-LGM30F-2-2-1, 35A2-5-36-1, 35D3-11-52-2, 35D3-11-52-4, 35D3-11-52-11, 35E9-266-1, 35C2-3-493-1						
5a	Tractor hydraulic system						
5a(1)	Perform trouble analysis						
5a(2)	Monitor systems						
5a(3)	Inspect						
5a(4)	Service						
5a(5)	Repair						
5b	Auxiliary power unit						
5b(1)	Inspect						
5b(2)	Service						
5b(3)	Operate						
5c	Semitrailer hydraulic system						
5c(1)	Inspect						
5c(2)	Service						
5c(3)	Repair						
5c(4)	Troubleshoot						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
5c(5)	Operate						INTIALS
5d	Perform TE preoperational inspection and checkout	5					
5e	Change tires						
5f	Missile emplacement system						
5f(1)	Inspect						
5f(2)	Service						
5f(3)	Perform operational checkout						
5f(4)	Repair						
5f(5)	Perform trouble analysis						
5f(6)	Functionally check out						
5f(7)	Adjust components						
5g	Handheld control unit						
5g(1)	Operate						
5g(2)	Troubleshoot						
5h	Environmental control unit						
5h(1)	Operate						
5h(2)	Troubleshoot						
6	MISSILE TRANSPORTER TR: TO 21M-LGM30F-2-2-1, 35M4-3-7-1, 35M4-3-7-435M4-3-8-1, 36A9-2-14-2						
6a	Missile semitrailer						
6a(1)	Inspect						
6a(2)	Service						
6a(3)	Repair						
6a(4)	Perform trouble analysis						
6b	Engine generator set						
6b(1)	Inspect						
6b(2)	Service						
6b(3)	Perform operational checkout						
6b(4)	Operate						
6c	Hydraulic system						
6c(1)	Inspect						
6c(2)	Service						
6c(3)	Repair						
6c(4)	Perform trouble analysis						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
6c(5)	Perform operational checkout						INTIALO
6c(6)	Operate						
6d	Environmental Control Unit						
6d(1)	Operate						
6d(2)	Troubleshoot						
7	MAINTENANCE AND SUPPORT TRUCKS TR: TO 21M-LGM30G-2-10 (-1), 35D4-7-4-2, 36A12-24-3-1, 36A2-3-93-4, LJG 20AF-95-001						
7a	Mechanical maintenance truck & Mono Rail Hoist						
7a(1)	Inspect						
7a(2)	Service						
7a(3)	Repair						
7a(4)	Perform operational checkout						
7a(5)	Operate hoist						
7a(5a)	Hoist Inspect						
7a(5b)	Hoist Service						
7a(5c)	Hoist Repair						
7a(5d)	Hoist Troubleshoot						
7b	Transporter erector support truck						
7b(1)	Inspect						
7b(2)	Service						
7b(3)	Perform operational checkout						
7b(4)	Repair						
7c	PMT Van TR: 36A9-8-56-1, 36Y16-25-1, 33D9-68-30-1						
7c(1)	Inspect						
7c(2)	Service						
7c(3)	Repair						
7c(4)	Perform trouble analysis						
7d	Hoists						
7d(1)	Inspect						
7d(2)	Service						
7d(3)	Repair						
7d(4)	Perform trouble analysis						
8	TEST EQUIPMENT						
8a	Operate	1					

ITEM#	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
8a(1)	Explosive set circuitry test set TR: TO, 33D9-38-15-21, 33A1-12-1147-1, 33A1-12-1198-1, 33A1-12-1300-1	3					
8a(2)	Control monitor TR: TO 21M-LGM30G-2-33						
8a(3)	Colorimetric gas tester TR: TO 21M-LGM30G-2-33, 21M-LGM30G-2-10 (-1)	3					
<i>8</i> b	Cable retractor test kit TR: TO 21M-LGM30G-2-28-X, 33K-1-X, 35M1-1-101						
8b(1)	Operate						
8b(2)	Remove components						
8b(3)	Replace components						
8b(4)	Adjust components						
8b(5)	Perform trouble analysis						
8b(6)	Perform test after reassembly						
8c	Leak test fixture TR: TO, 21M-LGM30G-2-22, 33K-1-X, 35M1-1-101						
8c(1)	Operate						
8c(2)	Remove components						
8c(3)	Replace components						
8c(4)	Perform trouble analysis						
8c(5)	Perform self test						
9	HAND LIFT TRUCKS TR: TO 35M1-1-101, 36A12-24-3-1, 35M3-8-11-1						
9a	Inspect						
9b	Service						
9c	Repair						
9d	Operate						
9e	Perform functional test						
9f	LF hydraulically operated battery handling set						
9f(1)	Inspect						
9f(2)	Service						
9f(3)	Operate						
9f(4)	Repair						
9f(5)	Perform functional test						
10	GUIDANCE AND CONTROL PURGING MANIFOLD TR: TO 33K-1-X, 35M1-1-101, 42B5-1-2, 36A9-8-58-1, 21M-LGM30G-2-22						
10a	Inspect						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
10b	Adjust						
10c	Repair						
10d	Operate						
10e	Replace nitrogen bottles						
10f	Troubleshoot						
10g	Perform component calibration procedures						
10h	Operate portable purge manifold TR: TO 21M-LGM30G-2-22						
11	HYDRAULIC PRESSURE CHARGING SET TR: TO 21-LG118A-2-28, 21M-LGM30X-2-28-X, 33K-1-X, 35M5-3-16-2						
11a	Inspect						
11b	Service						
11c	Troubleshoot components						
11d	Repair components						
11e	Perform functional test						
11f	Operate						
12	PORTABLE AIR CONDITIONER TR: TO 21M-LGM30F-2-2-1, 35C2-3-370-1, 35C2-3-370-14, 35C2-3-493-1, 35E9-25-3, 35E9-37-2, 35E9-270-1						
12a	Inspect						
12b	Service						
12c	Perform preoperational inspection						
12d	Perform preoperational checkout						
12e	Repair						
12f	Perform trouble analysis						
12g	Operate						
13	HYDRAULIC PUSHER SET TR: TO 21M-LGM30B-2-18, 21M-LGM30G-2-10 (-1), 35M27-3-11-1						
13a	Inspect						
13b	Service						
13c	Perform checkout						
13d	Perform trouble analysis						
13e	Repair						
13f	Operate	3					

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
14	COMPRESSED GAS CYLINDER/VALVE ASSEMBLY (P/N 25-25079-1/21) TR: TO 35M1-1-101, 21M-LGM30G-2-10 (-1); AFI 91-46						INITIALS
14a	Perform trouble analysis						
14b	Repair components						
14c	Perform test after reassembly						
14d	Operate	3					
15	PROOFLOAD FIXTURE TR: TO 33D9-68-30-1						
15a	Proofload hoisting units						
15b	Proofload adapters						
15c	Proofload slings						
16	AUXILIARY HOIST CONTROL TR: TO 35DA4-3-1						
16a	Inspect						
16b	Service						
16c	Operate						
17	HOISTING UNITS, ADAPTERS, AND SLINGS TR: TOs 1-1A-8, 11N-HRV-5022-2, 21M-LGM30F-4-X, 21M-LGM30G-2-33, 35M27-3-8-1,; AFOSH STD 91-46						
17a	Inspect						
17b	Repair						
17c	Proofload						
18	OPERATOR'S SEAT, MCC/DMCC TR: TO 21M-LGM30G-2-28-X, 35M1-1-101						
18a	Inspect						
18b	Repair						
18c	Perform functional checkout						
19	HYDRAULIC PURGE UNIT TR: TO 35D3-11-52-2						
19a	Operate						
19b	Repair						
19c	Troubleshoot						
20	ADJUSTABLE AIRCRAFT MAINTENANCE PLATFORM TR: TO 35A4-2-3-51, 35A4-2-5-1, 35A4-2-6-1						
20a	Inspect						
20b	Service						
20c	Operate						
20d	Repair						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
21	ELEVATOR WORK CAGE/GUIDED MISSILE MAINTENANCE PLATFORM TR: TO 21M-LGM30G-2-10 (-1), 35A4-2-31-1, 35A4-4-9-1, 33D9-68-30-1						INITIALS
21a	Inspect						
21b	Repair						
21c	Service						
21d	Certify secondary brake on GMMP						
21e	Operate to facilitate repair						
21f	Operate	3					
21g	Remove						
21h	Install						
21i	GMMP Test Fixture						
21i(1)	Inspect						
21i(2)	Operate						
21i(3)	Repair						
21i(4)	Troubleshoot						
22	TRANSLATING/LEVELING JACK SET TR: TO 21M-LGM30F-2-2-1, 35A2-5-25-1, 35M19-3-26-1, 21M-LGM30F-2-17-1						
22a	Inspect						
22b	Service						
22c	Operate						
22d	Repair						
22e	Perform trouble analysis						
23	PROOFLOAD TEST FACILITY (PLTF) TR: TO 33D9-68-30-1; CEM 21-SM80X-2-26-X, 35R-1-481-X, 35R-1-581-X, 35R-1-681-X						
23a	Inspect						
23b	Service						
23c	Repair						
23d	Hydraulic system						
23d(1)	Inspect						
23d(2)	Service						
23d(3)	Adjust						
23d(4)	Perform operational checkout						
23d(5)	Troubleshoot						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
23d(6)	Repair						
23e	Operate systems						
23f	PLTF operations TR: TO 33D9-68-30-1, 35D3-11-52-2, 35M3-8-11-1, LJG20AF-95-001						
23f(1)	Proofload test						
23f(1a)	PT						
23f(1b)	PMT Van						
23f(1c)	MGCS Truck						
23f(1d)	M-Van Mono Rail Hoist						
23f(2)	Transporter erector						
23f(2a)	Check out rigging						
23f(2b)	Check out cable tension						
23f(2c)	Proofload test hoist/sling rod						
23f(3)	Proofload test the mechanical maintenance support truck monorail hoist						
23f(4)	Position and tie-down the TE at the PLTF						
23f(5)	Remove the TE from the PLTF						
23g	Proofload						
23g(1)	Elevator workcage/Guided missile maintenance platform						
24	DYNOMONOMETER TR: Operational Manual						
24a	Inspect						
24b	Operate						
25	WING CODE PROCESSING SYSTEM (WCPS) PNEUMATIC DOOR TR: 31X8-2-2-2						
25a	Repair						
25b	Perform troubleshooting						
25c	Perform operational checkout						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
1	LAUNCH FACILITY AND MISSILE ALERT FACILITY (LG118A)						INITIALS
1a	Launch facility (LG-118A): TR: TOs 21-LG118A-2-10, 21-LG118A-2-17-(X), 21-LG118A-2-28, 33D9-61108						
1a(1)	Enter LER	5					
1a(2)	Enter LSB/LEB	5					
1a(3)	Enter launch tube						
1a(4)	Perform emergency shutdown						
1a(5)	Evacuate launch facility for EWO launch conditions						
1a(6)	Follow emergency procedures for electrical isolation of LSB/LEB						
1a(7)	Lower equipment						
1a(8)	Raise equipment						
1a(9)	Install MGCS/URM access barrier set						
1a(10)	Remove MGCS/URM access barrier set						
1a(11)	Exit launch tube						
1a(12)	Exit LER	5					
1a(13)	Exit LSB/LEB	5					
1a(14)	Perform hostile LF securing procedures						
1a(15)	Perform primary door alternate opening						
1a(16)	Perform LF diesel startup procedures						
1a(17)	Perform LF brine chiller restart procedures						
1b	Personnel access system TR: TO 21M-LGM30F-2-19, 21-LG118A-2-10, 35M1-9-2-2, 21-LG118A-2-17						
1b(1)	Inspect						
1b(2)	Service						
1b(3)	Remove and replace hand driven linear actuator						
1b(4)	Security Pit perform electrical test						
1c	Launcher closure TR: TOs 21-LG118A-2-10, 21-LG118A-2-28, 35M1-1-101, 21-LG118A-2-18-2; CEMs 21-SM80X-2-24-X, 21-SM80X-2-26-X, 35M-37-4-12, 11A15-1-167-1, 21M-LGM30F-112						
1c(1)	Inspect components						
1c(2)	Service components						
1c(3)	Remove components						
1c(4)	Replace components						
1c(5)	Repair components						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
1c(6)	Remove ballistic gas generator cartridge						INITIALS
1c(7)	Install ballistic gas generator cartridge						
1c(8)	Check out ballistic gas generator cartridge						
1c(9)	Open launcher closure	5					
1c(10)	Close launcher closure	5					
1c(11)	Inspect the actuating and locking mechanism						
1c(12)	Remove components of the actuating and locking mechanism						
1c(13)	Install components of the actuating and locking mechanism						
1c(14)	Remove multiplying linkage						
1c(15)	Repair multiplying linkage						
1c(16)	Install multiplying linkage						
1c(17)	Raise launcher closure						
1c(18)	Lower launcher closure						
1c(19)	Perform destructive break-in						
1d	Missile suspension system (LGM-118) TR: TO 21-LG118A-2-28						
1d(1)	Troubleshoot						
1d(2)	Remove launch bleed down initiator						
1d(3)	Install launch bleed down initiator						
1d(4)	Disconnect ordnance cable						
1d(5)	Connect ordnance cable	5					
1d(6)	Checkout Initiators						
1e	Secure code device (LGM-118) TR: TO 21-LG118A-2-11						
1e(1)	Install						
1e(2)	Remove						
1f	MUG/URM TR: TOs 21-LG118A-2-28, 21-LG118A-2-32, 21-LG118A-2-241						
1f(1)	Connect	5					
1f(2)	Disconnect						
1f(3)	Perform freon leak check						
1f(4)	Remove MUG						
1f(5)	Replace MUG						
1g	Simulated Electronic Launch Peacekeeper (SELP) TR: 33D9-61-108-1						
1g(1)	Prepare LF for Live Ordnance Test						
1g(1a)	Prepare VSIS for Live Ordnance						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
1g(1b)	Prepare for Launcher Closure Opening						INITIALS
1g(1c)	Connect VSIS for Live Ordnance						
1g(1d)	Connect LCA for Live Ordnance						
1g(2)	Cable Isolation						
1g(2a)	Cable De-isolation						
1g(2b)	Restore Launcher Closure System						
1g(2c)	Restore VSIS						
1g(2d)	Install RS after Live Ordnance						
1g(2e)	Enter LER						
1g(2f)	Exit LER						
2	LGM-118 MISSILE						
2a	Stage IV TR: TOs 21-LG118A-1, 21-LG118A-2-10, 21-LG118A-2-31, 21-LG118A-2-32, 21-LG118A-2-33, 21-LG118A-2-34, 21-LG118A-2-41, 21-LG118A-2-52, 21-LG118A-2-51, 21-LG118A-2-17-42, 21-LG118A-2-17-1						
2a(1)	Inspect						
2a(2)	Repair						
2a(3)	Remove MGCS access door						
2a(4)	Install MGCS access door						
2a(5)	Repair Stage IV access door nut plates/fasteners						
2a(6)	Remove						
2a(7)	Install	5					
2a(8)	Perform ECTS test	5					
2a(9)	Perform ECTS stand alone						
2a(10)	Perform roll transfer						
2a(11)	Perform and follow emergency procedures						
2a(12)	Transport/Convoy procedures						
2a(13)	Process for LF						
2a(14)	Process for shipment						
2a(15)	Process for storage						
2a(16)	Remove replace stage IV batteries						
2b	Stage III TR: TOs 21-LG118A-2-10, 21-LG118A-2-31, 21-LG118A-2-32, 21-LG118A-2-33, 21-LG118A-2-41, 21-LG118A-2-52, 21-LG118A-2-51, 21-LG118A-2-17-12						
2b(1)	Inspect						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
2b(2)	Repair						INITIALS
2b(3)	Remove						
2b(4)	Install	5					
2b(5)	Perform ECTS test						
2b(6)	Perform ECTS stand alone						
2b(7)	Perform roll transfer						
2b(8)	Perform and follow emergency procedures						
2b(9)	Transport/Convoy procedures						
2b(10)	Process for LF						
2b(11)	Process for shipment						
2b(12)	Process for storage						
2c	Stage II TR: TOs 21-LG118A-2-10, 21-LG118A-2-31, 21-LG118A-2-32, 21-LG118A-2-33, 21-LG118A-2-41, 21-LG118A-2-52, 21-LG118A-2-51, 21-LG118A-2-17-1						
2c(1)	Inspect						
2c(2)	Repair						
2c(3)	Remove						
2c(4)	Install	5					
2c(5)	Perform ECTS test						
2c(6)	Perform ECTS stand alone						
2c(7)	Perform roll transfer						
2c(8)	Perform and follow emergency procedures						
2c(9)	Transport/Convoy procedures						
2c(10)	Process for LF						
2c(11)	Process for shipment						
2c(12)	Process for storage						
2d	Stage I TR: TOs 21-LG118A-2-31, 21-LG118A-2-32, 21-LG118A-2-33, 21-LG118A-2-41, 21-LG118A-2-52, 21-LG118A-2-51, 21-LG118A-2-17-12, 21-LG118A-2-17-1						
2d(1)	Inspect						
2d(2)	Repair						
2d(3)	Remove						
2d(4)	Install	5					
2d(5)	Perform ECTS stand alone						
2d(6)	Perform roll transfer						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
2d(7)	Perform and follow emergency procedures						INITIALS
2d(8)	Transport/Convoy procedures						
2d(9)	Process for LF						
2d(10)	Process for shipment						
2d(11)	Process for storage						
3	LGM-118 MISSILE AEROSPACE VEHICLE EQUIPMENT (AVE)						
3a	Reentry system TR: TOs 21-LG118A-2-32, 21-LG118A-2-33, 21-LG118A-2-17-2						
3a(1)	Mate mechanically	5					
3a(2)	Mate electrically	5					
3a(3)	Demate						
3a(4)	Perform roll transfer at ASI						
3a(5)	Transport/Convoy procedures TR: AFSPCI31-10101						
3a(6)	Perform roll transfer at emplacer						
3a(7)	Perform and follow emergency procedures						
3b	Missile Guidance and Control Set (MGCS) TR: TOs 21-LG118A-1, 21-LG118A-2-34, 21-LG118A-12-1, 21-LG118A-2-52						
3b(1)	Remove						
3b(2)	Install	5					
3b(3)	Remove components						
3b(4)	Install components						
3b(5)	Load						
3b(6)	Unload						
3b(7)	Handle						
3b(8)	Transport						
3b(9)	Perform freon leak check						
3b(10)	Inspect						
3b(11)	Store						
3b(12)	Perform certification test						
3b(13)	Connect/Disconnect RSSC Coupler						
4	MISSILE GUIDANCE AND CONTROL SET SUPPORT TRUCK TR: TOs 21-LG118A-2-10, 21-LG118A-2-34, 36A13-31-1						
4a	Perform preoperational inspection						
4b	Hoists						
4b(1)	Inspect						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
4b(2)	Operate						INITIALS
4c	Air compressor						
4c(1)	Inspect						
4c(2)	Operate						
4d	Environmental Control System						
4d(1)	Operate						
4e	Auxiliary power unit						
4e(1)	Inspect						
4e(2)	Service						
4e(3)	Operate						
4f	Operate security system						
5	AIR ELEVATOR SEMITRAILER TR: TOs 21-LG118A-2-10, 21-LG118A-2-241, 35M10-7-5-1, 35M10-7-6-1, 36A9-11-16-1, 36A9-11-15-11						
5a	Operate						
5b	Position						
5c	Connect						
5d	Disconnect						
5e	Perform preoperational inspection						
5e(1)	Trailer						
5e(2)	AM general tractor						
5f	Operate air elevator control module panel						
5g	Troubleshoot						
6	TYPE II TRANSPORTER TR: TO 21-LG118A-2-32, 21-LG118A-2-33, 35D3-11-46-1, 35M1-10-21, 36A-13-29-1, 36A-13-29-1						
6a	Perform preoperational inspection						
6a(1)	Tractor	5					
6a(2)	Trailer	5					
6b	Operate						
6c	Position/stabilize						
6d	Destabilize						
6e	Operate container APU				1		
6f	Operate HPS						
6g	Troubleshoot						
6h	Adjust ADS wedge block						

ITEM#	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
7	EMPLACER						INITIALS
7a	TR: TOs 21-LG118A-2-10, 21-LG118A-2-32, 36A9-11-14-1 Position and perform tiedown/stabilization	5			1		
	'	3					
7b	Destabilize and prepare for transport						
7c	Pre-transport procedure						
7d	Work platforms						
7d(1)	Install						
7d(2)	Remove						
7d(3)	Inspect						
7d(4)	Repair						
7e	Operate emplacer control panel						
7e(1)	Topside						
7e(2)	LER						
7f	Troubleshoot						
7g	Perform preoperational inspection						
7h	Operate						
8	TEST EQUIPMENT						
8a	Operate						
8a(1)	Colorimetric gas tester TR: TO 21-LG118A-2-10, 21-LG118A-2-33	3					
8a(2)	MGCS certification test set TR: TO 21-LG118A-12-1						
8a(3)	Electronic freon leak detector TR: TOs 21-LG118A-2-10, 21-LG118A-2-34						
8a(4)	Air sampling equipment TR: TO 21-LG118A-2-10, 11H5-29-1, 11H5-35-1						
8a(5)	Optical micrometer TR: TO 21-LG118A-2-34						
8a(6)	Electronic checkout test set TR: TO 21-LG118A-2-41						
8a(7)	Operator resistivity meter TR: TO 21-LG118A-2-31, 21-LG118A-2-32						
8a(8)	Electrostatic field meter TR: TO 21-LG118A-2-32						
8a(9)	Explosive Circuitry Test Set TR: TO 33D9-38-15-21						
8b	Compressed Gas Cylinder/ Valve Assembly (P/N 25-25079-1/21) TR: TO 21-LG118A-2-10						
8b(1)	Operate						

ITEM#	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
9	ELEVATOR WORK CAGE AND HOIST ASSEMBLY (PN 407- 52895-1 and 407- 48750) TR: TOs 21-LG118A-2-10, 35M3-8-11-1						INITIALS
9a	Inspect						
9b	Service						
9c	Install						
9c(1)	One man						
9c(2)	Two man						
9c(3)	Spider						
9d	Remove						
9d(1)	One man						
9d(2)	Two man						
9d(3)	Spider						
9e	Operate						
9e(1)	One man						
9e(2)	Two man						
9e(3)	Spider						
9f	Repair components						
9g	Perform trouble analysis						
9h	Proofload						
10	PEACEKEEPER TRANSPORTATION AND HANDLING EQUIPMENT TR: TOs 21-LG118A-2-10, 21-LG118A-2-34, 35M3-8-14-1						
10a	Missile guidance control emplacement set						
10a(1)	Inspect						
10a(2)	Install						
10a(3)	Remove						
10a(4)	Repair components						
10a(5)	Remove components						
10a(6)	Replace components						
10a(7)	Adjust components						
10b	MGCS rotation fixture						
10b(1)	Inspect						
10b(2)	Repair components						
10b(3)	Remove components						
10b(4)	Replace components						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
10c	LER 1 work platform TR: TOs 35M3-8-11-1, 21-LG118A-2-10, 21-LG118A-2-32						INITIALS
10c(1)	Inspect						
10c(2)	Install						
10c(3)	Remove						
10c(4)	Repair components						
10d	LER 2 work platform TR: TO 35M3-8-11-1, 21-LG118A-2-10						
10d(1)	Inspect						
10d(2)	Install						
10d(3)	Remove						
10d(4)	Repair components						
11	PNEUMATIC CONTROL CART TR: TO 21-LG118A-2-10, 21-LG118A-2-32, 21-LG118A-2-33, 35D29-8-8-1						
11a	Inspect						
11b	Operate						
11c	Troubleshoot						
11d	Repair Components						
12	LAUNCH EJECTION GAS GENERATOR (LEGG) TR: TOs 21-LG118A-2-10, 21-LG118A-2-31, 21-LG118A-2-32, 21-LG118A-2-33						
12a	Install	1					
12b	Remove						
12c	Prepare for shipment						
12d	Process						
12e	Perform emergency procedures						
12f	Hot Gas Generator (HGG) TR: TO 21-LG118A-2-31						
12f(1)	Inspect						
12f(2)	Install						
12f(3)	Remove						
13	LONGITUDINAL SUPPORT ASSEMBLY (LSA) TR: TOs 21-LG118A-2-10, 21-LG118A-2-31, 21-LG118A-2-32, 21-LG118A-2-33						
13a	Install						
13b	Remove						
13c	Process						
13d	Roll transfer	1					

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
14	MISSILE AIR ELEVATOR TR: TOs 21-LG118A-2-10, 21-LG118A-2-32, 21-LG118A-2-241						INITIALS
14a	Install						
14b	Remove						
14c	Troubleshoot						
15	OVERHEAD CRANES TR: TO 21-LG118A-2-31; CEM 21-SM11BA-2-232-2						
15a	Operate						
15b	Troubleshoot						
15c	Perform emergency procedures						
16	MISSILE HANDLING EQUIPMENT TR: TOs 21-LG118A-2-31, 35D6-23-1, 35M3-8-15-1, 35M35-6-1, 36A9-11-14-1, 1-1A-8						
16a	End ring						
16a(1)	Install						
16a(2)	Remove						
16a(3)	Perform pre-operational checkout						
16a(4)	Inspect						
16a(5)	Repair						
16b	Lifting adapter						
16b(1)	Install						
16b(2)	Remove						
16b(3)	Inspect						
16b(4)	Repair						
16c	Saddle pallet cradle assembly						
16c(1)	Install						
16c(2)	Remove						
16c(3)	Perform pre-operational checkout						
16c(4)	Inspect						
16c(5)	Repair						
16d	Carriages						
16d(1)	Install						
16d(2)	Remove						
16d(3)	Perform pre-operational checkout						
16d(4)	Roll transfer						
16d(5)	Inspect	1					

ITEM#	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
16d(6)	Repair						INITIALS
16e	Handling slings						
16e(1)	Install						
16e(2)	Remove						
16e(3)	Inspect						
16e(4)	Repair						
17	LOAD POSITIONER TR: TOs 21-LG118A-2-31, 34D4-5-3-11, 35D4-5-3-11						
17a	Operate 10 ton						
17b	Service 10 ton						
17c	Operate 25 ton						
17d	Service 25 ton						
18	RAIL TRANSFER FACILITY TR: TOs 21-LG118A-2-33, 36M1-3-30-1						
18a	Perform pre-operational inspection						
18b	Operate						
18c	Transfer container from railcar to storage pad						
18d	Transfer container from storage pad to type II						
18e	Transfer container from type II to railcar						
18f	Transfer container from type II to storage pad						
18g	Perform emergency procedures						
18h	Transfer container from storage to railcar						
18i	Transfer container from railcar to type II						
19	CANISTER TR: TOs 21-LG118A-1, 21-LG118A-2-28, 21-LG118A-2-32, 21-LG118A-2-34, 21-LG118A-2-241						
19a	Adjust components						
19b	Remove components						
19c	Install components						
19d	Open/close canister MUG/URM access door						
19e	Open Stage IV access door						
19f	Close Stage IV access door						
19g	Inspect access door fasteners						
19h	Repair access door fasteners						
19i	Manually operate LRM/EPS						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
20	LRM/EPS WORK PLATFORMS TR: TO 21-LG118A-2-10						
20a	Install platforms						
20b	Remove platforms						
21	OPERATE HYDRAULIC PUSHER SET TR: TO 21-LG118A-2-10	3					

	ICBM Force Development Testing Maintenance		•				Ta-==:=:::::::
ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
1	PORTABLE DIESEL ELECTRIC POWER UNIT TR: CEM 21-SM80-102						
1a	Operate						
2	EQUIPMENT CRANE TR: TOs 34M-3-24-1, 36M-3-24-11, 45C3-5-24-1, 35L3-5-15-21, 36C3-5-11-1, AFOSH 127-46						
2a	Inspect cables						
2b	Remove cables						
2c	Install cables						
3	MOD 7 MGS AND PSRE AT AS&I/LF TR: TOs 21-LG30G-2-33, 21M-LGM30F-2-17-3, 21M-LGM30G-2-8						
3a	Mate						
3b	Demate						
4	MOD 7/8 UMBILICAL TR: TOs 21M-LGM30F-2-17-3, 21-LGM30X-2-18						
4a	Connect at missile						
4b	Disconnect at missile						
5	MOD 7 INSTRUMENTATION CABLES (P/J753-P748) THIRD STAGE to PSRE TR: TO 21M-LGM30F-2-17-3						
5a	Connect						
5b	Disconnect						
6	THIRD STAGE PSS SAFE/ARM ACTUATOR (AODS) TR: TOs 21M-LGM30F-2-17-3, 21M-LGM30F-2-17-5						
6a	Install						
6b	Remove						
7	MOD 7/8 UMBILICAL AT INSTRUMENTATION BOX TR: TOs 21M-LGM30F-2-17-3, 21M-LGM30F-2-17-4, 33D9-1-167-1						
7a	Analyze malfunctions						
7b	Certify system serviceability						
7c	Connect						
7d	Disconnect						
8	JUMPER NCU UMBILICAL AT LEPS RACK (LF04, LF09, LF10, LF26) TR: TO 21M-LGM30F-2-17-3						
8a	Connect						
8b	Disconnect						
9	R/S SEPARATION CABLES TR: TOs 21M-LGM30F-2-17-3, 11NRS12-2-2						
9a	Connect						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
9b	Disconnect						INTIALS
10	MOD 7 CTLI SAFING PINS						
10a	TR: TO 21M-LGM30F-2-17-3 Remove						
10b	Install						
11	UPLOAD/DOWNLOAD THIRD STAGE IN PT TR: THIRD STAGE TRAINER AID JAN 84						
12	REMOVE/INSTALL COMMAND DESTRUCT ANTENNA COVERS TR: TO 21M-LGM30F-2-17-3						
13	ROLL X-FER OF MSL FROM T/E TO MSB OR MPF TR: TOs 21M-LGM30F-2-2-1, 21M-LGM30F-2-17-1, 21M-LGM30F-2-17-9, 35D3-11-52-2, 35D3-11-52-1						
13a	Pre-roll procedures						
13b	Roll-transfer procedures						
13c	Post-roll transfer procedures						
14	ROLL X-FER OF MSL FROM MSB OR MPF TO T/E TR: TOs 21M-LGM30F-2-2-1, 21M-LGM30F-2-17-1, 21M-LGM30F-2-17-9, 35D3-11-52-2						
14a	Pre-roll transfer procedures						
14b	Roll-transfer procedures						
14c	Post-roll transfer procedures						
15	ROLL X-FER OF MSL FROM MT TO MSB/MPF TR: TOs 21M-LGM30F-2-2-1, 21M-LGM30F-2-17-1, 21M-LGM30F-2-17-9, 35D3-11-52-2, 33A1-12-1124-1						
15a	Pre-roll transfer procedures						
15b	Roll-transfer procedures						
15c	Post-roll transfer procedures						
16	ROLL X-FER OF MSL FROM MSB/MPF TO MT TR: TOs 21M-LGM30F-2-17-1, 21M-LGM30F-2-17-9, 21M-LGM30F-2-2-1, 35D3-11-52-2, 33A1-12-1124-1						
16a	Pre-roll transfer procedures						
16b	Roll-transfer procedures						
16c	Post-roll transfer procedures						
17	FOLLOW PROCEDURES FOR MT EMPTY ROCKET MOTOR CARRIAGE HANDLING USING FORKLIFT AND SLING TR: TO 21M-LGM30F-2-2-1						
18	MISSILE EMPLACEMENT AT (LFO3) OR (LF06) TR: TOs; 21M-LGM30F-2-17-1						
18a	Position and tiedown TE at LF						
18b	Prepare TE for Missile emplacement						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
18c	Emplace Missile						INITIALS
18d	Prepare TE for Travel						
18e	Remove TE from Pylons/LF						
19	MISSILE REMOVAL AT (LFO3) OR (LF06) TR: TOs 21M-LGM30F-2-17-1						
19a	Position and tiedown TE at LF						
19b	Prepare TE for Missile removal						
19c	Remove missile						
19d	Prepare TE and Missile for travel						
19e	Remove TE from Pylon/LF						
20	FOLLOW PROCEDURES TO INSTALL AND REMOVE FIRST STAGE CARRIAGE AFT BAND EXTENSION BLOCKS TR: TO 21M-LGM30F-2-2-1						
21	LAUNCHER CLOSURE ARRESTOR ASSEMBLY TR: TOs 21-LG118A-2-28, 21M-LGM30G-2-18, 21SM80B-2-26-5, 21SM80F-2-26: CEMs 33R1-771-1, 35R1-481-1, 35R1-581-5, 35R-1-681-1, 21SM118A-2-26-1						
21a	Inspect						
21b	Service						
21c	Repair						
21d	Leak test						
21e	Overhaul						
21f	Reset						
21g	Checkout						
21h	Rotation						
21i	Restoration						
22	D6A HYDRAULIC TEST STAND TR: TOs 33A2-2-6-51, 33A2-2-23, 21M-LGM30X-2-18-X						
22a	Inspect						
22b	Service						
22c	Perform pre-operational procedures						
22d	Repair						
22e	Operate						
23	MISSILE TRANSFER WINCH SET CTL TR: TO 35D4-2-45-1; AFOSH 127-46						
23a	Inspect cables						
23b	Replace cables						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
23c	Perform functional checkout						INITIALS
24	OPERATE PNEUMATIC SWAGGER TR: TOs 32A16-3-1, 33A8-4-6-1						
24a	Fabricate cable ends						
24b	Operate pull tester to verify cable ends						
25	LAUNCH FACILITY, MISSILE ALERT FACILITY AND SUPPORT BASE FACILITIES (PERSONNEL ACCESS SYSTEM - PRIMARY DOOR) TR: TOs 21M-LGM30F-2-19, 21M-LGM30F-2-10-1, 35M-9-2-2						
25a	Troubleshoot hydraulic components						
25b	Remove hydraulic components						
25c	Replace hydraulic components						
26	TYPE I AND II TRANSPORTER TR: TOs 35D3-11-46-1, 36A13-29-1, 21-LG118A-2-17-1, 21-LG118A-6WC-5, 38G1-84-1						
26a	Operate/perform pre-operational checkout						
26b	Position/stabilize						
26c	Destabilize						
26d	APU						
26d(1)	Perform pre-operational checkout						
26d(2)	Operate						
26e	Troubleshoot						
26f	Adjust ADS wedge block						
26g	Hydraulic system						
26g(1)	Operational checkout						
26g(2)	Inspect/service						
26g(3)	Troubleshoot						
26g(4)	Repair components						
26h	Transfer System						
26h(1)	Operational checkout						
26h(2)	Inspect/service						
26h(3)	Troubleshoot						
26h(4)	Repair components						
27	OSHKOSH TRACTOR TR: TO 36A13-29-1						
27a	Perform pre-operational checkout						
27b	Operate						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
28	STAGE CONTAINERS						INITIALS
28a	TR: TOs 35M1-10-2-1, 35E20-2-32-1, 21-LG118A-1-17, -12 Transfer from/to railcar to/from Type 1						
28b	Transfer from/to Type II to/from Type I						
28c	Transfer from/to Storage pad to/from Type I						
28d	Transfer from/to SPF-A/B						
29	PERFORM HANGFIRE PROCEDURES TR: TO 21-LG118A-2-17-2						
30	CANNISTERS TR: TOs 21-LG118A-2-241, 21-LG118A-1, 21-LG118A-2-34, 21-LG118A-2-41, 21-LG118A-2-28, 35M3-3-11-1						
30a	Remove Velocity transducers						
31	METERS TR: TOs, 33A1-12-928-1						
31a	Milli-ohmeter						
32	MISSILE SUSPENSION SYSTEM TR: TO 21-LG118A-2-28						
32a	Remove launch bleed down initiator						
32b	Install launch bleed down initiator						
32c	Disconnect ordnance cable						
32d	Connect ordnance cable						
33	AIR ELEVATOR SEMITRAILER TR: TOS 21-LG118A-2-10, 21-LG118A-2-33, 21-LG118A-2-141, 33M10-7-5-1, 35M19-2-22-1, 35M1-10-3-2, 35M10-7-5-1, 35M10-6-1, 34Y18-5-1, 21-LG118A-6WC-5, 11F53-3-7, 36C-13-1						
33a	Hydraulic System						
33a(1)	Operational checkout						
33a(2)	Inspect/service						
33a(3)	Repair components						
33b	Pneumatic System						
33b(1)	Operational checkout						
33b(2)	Inspect/service						
33b(3)	Troubleshoot						
33b(4)	Repair components						
33c	Air Compressor						
33c(1)	Inspect/service						
33c(2)	Troubleshoot						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
33c(3)	Repair components						INITIALS
33d	After Cooler						
33d(1)	Inspect						
33d(2)	Troubleshoot						
33d(3)	Repair components						
33e	Desiccant Dryer						
33e(1)	Inspect						
33e(2)	Troubleshoot						
33f	Fire Suppression Systems						
33f(1)	Inspect						
33f(2)	Troubleshoot						
33f(3)	Repair components						
34	MISSILE GUIDANCE AND CONTROL SUPPORT TRUCK TR: TOs 21-LG118A-2-10, 21-LG118A-2-34, 36A13-31-1, 36A13-31-1, 21-LG118A-6WC-3, 36Y35-27-1, 36M1-16-1, 36M1-2-16-1C						
34a	Analyze malfunctions						
34b	Certify system serviceability						
34c	Hoists						
34c(1)	Service						
34c(2)	Operational checkout						
34c(3)	Troubleshoot						
34c(4)	Repair Components						
34d	Auxiliary hoist						
34d(1)	Inspect						
34d(2)	Repair components						
34e	Container assembly						
34e(1)	Inspect						
34e(2)	Repair components						
35	EMPLACER TR: TOs 21-LG118A-2-10, 21-LG118A-2-32, 21-LG118A-2-33, 36A9-11-141, 21-LG118A-2-17-32, 36A9-11-14-1, 21-LG118A-6WC-3, 21-LG118A-6WC-5						
35a	Position and perform tiedown/stabilization						
35b	Analyze malfunctions						
35c	Certify system serviceability						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
35d	Work platforms						INITIALS
35d(1)	Install						
35d(2)	Remove						
35e	Operate emplacer control panel						
35f	Perform pre-operational checkout						
35g	Operate						
35h	Hydraulic system						
35h(1)	Operational checkout						
35h(2)	Inspect/service						
35h(3)	Troubleshoot						
35h(4)	Repair components						
35h(5)	Adjust						
35i	Missile emplacement system						
35i(1)	Analyze malfunctions						
35i(2)	Certify system serviceability						
35i(3)	Operational checkout						
35i(4)	Inspect/service						
35i(5)	Troubleshoot						
35i(6)	Repair components						
35i(7)	Adjust						
35j	Container assembly						
35j(1)	Inspect components						
35j(2)	Repair components						
36	ELEVATOR WORKCAGE AND HOIST ASSEMBLY (409-52-874/875) TR: 21-LG118A-2-10, 35M3-8-11-1, 21-LG118A-2-28, 21M-LGM30G-2-28, 21M-LGM30G-2-28-1, 33K-1-X, 35M-3-16-2						
36a	Two man						
36a(1)	Install						
36a(2)	Remove						
36a(3)	Operate						
36a(4)	Inspect						
36a(5)	Service						
36a(6)	Perform trouble analysis						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
36a(7)	Repair components						INITIALS
37	PEACEKEEPER TRANSPORTATION AND HANDLING EQUIPMENT TR: TOs 21-LG118A-2-10, 21-LG118A-218-2, 21-LG118A-2-34, 35M3-8-14-1, 35M3-8-11-1						
37a	Missile guidance and control emplacement set						
37a(1)	Inspect						
37a(2)	Repair components						
37a(3)	Remove components						
37a(4)	Replace components						
37a(5)	Adjust components						
37b	MGCS rotation fixture						
37b(1)	Operation						
37b(2)	Inspect						
37b(3)	Repair components						
37b(4)	Remove components						
37b(5)	Replace components						
37c	LER 1 work platform						
37c(1)	Description						
37c(2)	Inspect						
37c(3)	Repair components						
37c(4)	Install						
37c(5)	Remove						
37d	LER 2 work platform						
37d(1)	Description						
37d(2)	Inspect						
37d(3)	Repair components						
37d(4)	Install						
37d(5)	Remove	1					
38 38a	PNEUMATIC CONTROL CART ASSEMBLY (409-52-874/875) TR: TOs 21-LG118A-2-10, 21-LG118A-2-32, 21-LG118A-2-33, 21-LG118A-6WC-3, 35D29-8-8-1 Perform pre-operational checkout						
38b	Operate	1					
38c	Inspect and service	-					
38d	Troubleshoot	_					
sou	Troubleshoot						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
38e	Repair components						INITIALS
39	LAUNCH EJECTION GAS GENERATOR (LEGG) TR: 21-LG118A-2-10, 21-LG118A-2-31, 21-LG118A-2-32, 21-LG118A-2-33, 21-LG118A-2-241						
39a	Install						
39b	Remove						
39c	Prepare for shipment						
39d	Process						
39e	Perform emergency procedures						
40	LONGITUDINAL SUPPORT ASSEMBLY (LSA) TR: 21-LG118A-2-10, 21-LG118A-2-31, 21-LG118A-2-32, 21-LG118A-2-33, 21-LG118A-2-241						
40a	Install						
40b	Remove						
41	OVERHEAD CRANES TR: 21-LG118A-2-31, CEM 21-SM118A-2-232-2, AFOSH 127-46						
41a	Operate						
41b	Perform emergency procedures						
42	MISSILE HANDLING EQUIPMENT TR: 21-LG118A-2-31, 35D6-23-1, 35M-8-15-1, 35M35-6-1, 21-LG118A-2-17-12						
42a	End ring						
42a(1)	Install						
42a(2)	Remove						
42a(3)	Perform pre-operational checkout						
42b	Lifting adapter						
42b(1)	Install						
42b(2)	Remove						
42b(3)	Perform pre-operational checkout						
42c	Saddle pallet cradle assembly						
42c(1)	Install						
42c(2)	Remove						
42c(3)	Perform pre-operational checkout						
42d	Carriages						
42d(1)	Install						
42d(2)	Remove						
42d(3)	Perform pre-operational checkout						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
42d(4)	Roll transfer						INITIALS
42e	Handling slings						
42e(1)	Install						
42e(2)	Remove						
42e(3)	Perform pre-operational checkout						
43	LOAD POSITIONER TR: TOs 21-LG118A-2-31, 35D2-5-3-16, 35D4-3-11-1, 21-LG118A-2-17-12						
43a	Operate 5 ton						
43b	Operate 10 ton						
43c	Operate 25 ton						
44	STAGE IV HANDLING SLINGS TR: TOs 36D6-6-23-1, 21-LG118A-6WC-3						
44a	Inspect/service						
44b	Troubleshoot						
44c	Repair components						
45	CONTAINER HANDLING SPREADER TR: TOs 32A-34-3-1, 21-LG118A-6WC-3						
45a	Inspect/service						
45b	Troubleshoot						
45c	Repair components						
46	STAGE I/II/III/IV END RING SET TR: TOs 35M35-6-1, 21-LG118A-6WC-3						
46a	Inspect/service						
46b	Troubleshoot						
46c	Repair components						
47	STAGE I/II/III/IV CARRIAGE SET TR: TOs 35M35-6-1, 21-LG118A-6WC-3						
47a	Inspect/service						
47b	Troubleshoot						
47c	Repair components						
48	REENTRY SYSTEM CARRIAGES TR: TOs 35M35-6-1, 21-LG118A-6WC-3						
48a	Inspect/service						
48b	Troubleshoot						
48c	Repair components						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
49	STAGE IV/RS/LEGG/LSA CARRIAGE SLING TR: TOs 35M35-8-15-1, 21-LG118A-6WC-3						INTIALS
49a	Inspect/service						
49b	Troubleshoot						
49c	Repair components						
50	LEGG/LSA CARRIAGE SET TR: TOs 35M35-8-6-1, 21-LG118A-6WC-3						
50a	Inspect/service						
50b	Troubleshoot						
50c	Repair components						
51	HYDRAULIC PURIFICATION UNIT TR: TO 35M15-2-9-1						
51a	Operational checkout						
51b	Inspect/service						
51c	Troubleshoot						
51d	Repair components						
52	STAGE I/II/III SHIPPING & STORAGE CONTAINER TR: TOs 35E20-2-32-1, 21-LG118A-6WC-3						
52a	Inspect						
52b	Repair						
53	STAGE IV SHIPPING & STORAGE CONTAINER TR: TOs 35E20-2-35-1, 21-LG118A-6WC-3						
53a	Inspect/service						
53b	Troubleshoot						
53c	Repair components						
54	STAGE IV/RS/LEGG/LSA TR: TOs 35E20-2-38-1, 21-LG118A-6WC-3						
54a	Inspect/service						
54b	Repair components						
55	REENTRY SYSTEM TRANSPORT VEHICLE TR: 35M3-8-13-1, 21-LG118A-6WC-3						
55a	Inspect						
55b	Repair components						
56	END RING HANDLING SLING TR: TOs 35M3-8-15-1, 21-LG118A-6WC-3						
56a	Inspect/service						
56b	Repair components						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
57	STAGE III HANDLING BEAM TR: TOs 35M3-8-15-1, 21-LG118A-6WC-3						INITIALS
57a	Inspect						
57b	Repair components						
58	SOLID STAGE LIFTING ADAPTER SET TR: TOs 35M3-8-15-1, 21-LG118A-6WC-3						
58a	Inspect						
58b	Repair components						
59	AUXILIARY SUPPORT EQUIPMENT TR: TOs 35D3-11-49-1, 21-LG118A-6WC-3						
59a	Inspect						
59b	Repair components						
60	STAGE III LIFTING SADDLE PALLET TR: TOs 35M3-8-15-1, 21-LG118A-6WC-3						
60a	Inspect/service						
60b	Repair components						
61	GCCU LRU ADAPTER HANDLING SET TR: TOs 35M3-8-11-1, 21-LG118A-6WC-3						
61a	Inspect						
61b	Repair components						
62	MJ1-1 DIESEL HYDRAULIC TEST STAND TR: TOs 33A2-2-21-31, 33A2-2-1-146WC-1, 33A2-2-1-166WC-2						
62a	Operational checkout						
62b	Inspect/service						
62c	Troubleshoot						
62d	Repair components						
62e	Operate						
63	PROOFLOAD TEST OPERATION TR: TOs 36A9-11-14-1, 33A2-2-21-31, 35M3-8-11-1						
63a	Emplacer						
63b	Elevator workcage hoist set						
63c	Elevator workcage						
64	LIQUID SPRING SERVICE KIT TR: TOs 21-LG118A-2-28, 35M3-3-11-1						
64a	Operate						
64b	Inspect						
64c	Service						
64d	Perform functional check						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
64e	Repair						INTIALO
64f	Troubleshoot						
65	MGCS FLOOR ACCESS BARRIER TR: TOs 35M3-8-11-1, 21-LG118A-6WC-3						
65a	Inspect						
65b	Repair components						
66	STAGE IV TILT HANDLER TR: 35D25-1-102						
66a	Inspect						
66b	Service						
66c	Repair						
67	REMOVE PORT SEALS TR: TOs 21-LG118A-2-17-12						
67a	Stage I						
67b	Stage II						
68	FIRING UNIT/SIGNAL CONDITIONER (FU/FUSC) MOUNTING BRACKETS TR: TOs 21-LG118A-2-17-12						
68a	Install stage II						
68b	Remove stage II						
69	FIRING UNIT/SIGNAL CONDITIONER (FU/FUSC) TR: TOs 21-LG118A-2-17-42, 21-LG118A-2-248, 21-LG118A-2-17-12						
69a	Install						
69a(1)	Stage I						
69a(2)	Stage II						
69a(3)	Stage III						
69a(4)	Stage IV						
69b	Remove						
69b(1)	Stage I						
69b(2)	Stage II						
69b(3)	Stage III				1		
69b(4)	Stage IV						
70	LINEAR SHAPED CHARGE ORDNANCE TRANSMISSION ASSEMBLY (LSC/OTA) TR: TOs 21-LG118A-2-17-12						
70a	Install						
70a(1)	Stage I						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
70a(2)	Stage II						INITIALS
70a(3)	Stage III						
70b	Remove						
70b(1)	Stage I						
70b(2)	Stage II						
70b(3)	Stage III						
71	TEST LAUNCH CABLE SET (TLCS) TR: TOs 21-LG118A-2-51, 21-LG118A-2-17-12						
71a	Install						
71a(1)	Stage I						
71a(2)	Stage II						
71a(3)	Stage III						
71b	Remove						
71b(1)	Stage I						
71b(2)	Stage II						
71b(3)	Stage III						
71c	Checkout						
71c(1)	Analyze malfunctions						
71c(2)	Certify system serviceability						
71c(3)	Stage I						
71c(4)	Stage II						
71c(5)	Stage III						
72	ELECTRICAL CHECKOUT TEST SET (ECTS) TR: TOs 21-LG118A-2-51, 21-LG118A-2-17-12, 33D9-54-68-2						
72a	Set up						
72b	Self test						
73	PERFORM LOW VOLTAGE CONTINUITY TEST SET (LVCTS) CONTINUITY TEST TR: TOs 21-LG118A-2-17-12, 33D9-89-24-1						
73a	Analyze malfunctions						
73b	Certify system serviceability						
73c	Stage I						
73d	Stage II						
73e	Stage III						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
74	PERFORM STAGE TEST SET (STS) CONTINUITY TEST TR: TOs 21-LG118A-2-17-12, 33D9-89-23-1						INITIALS
74a	Stage I						
74b	Stage II						
74c	Stage III						
75	INSTALL CONNECTOR BOOTS AND THERMAL INSULATION TR: TOs 21-LG118A-2-17-12						
75a	Stage I						
75b	Stage II						
75c	Stage III						
76	ORDNANCE TRANSMISSION ASSEMBLY (OTA) EXPLODING BRIDGEWIRE (EBW) TR: TOs 21-LG118A-2-17-12, 21-LG118A-2-17-42						
76a	Connect						
76a(1)	Stage I						
76a(2)	Stage II						
76a(3)	Stage III						
76a(4)	Stage IV						
76b	Disconnect						
76b(1)	Stage I						
76b(2)	Stage II						
76b(3)	Stage III						
76b(4)	Stage IV						
77	CONNECT TEST LAUNCH CABLE SET (TLCS) TO FTOS COMPONENTS TR: TOs 21-LG118A-2-17-12						
77a	Stage I						
77b	Stage II						
77c	Stage III						
78	PRESSURE SWITCH ASSEMBLY (PS) TR: TOs 21-LG118A-2-17-12, 21-LG118A-2-17-42						
78a	Install						
78a(1)	Stage II						
78a(2)	Stage III						
78a(3)	Stage IV						
78b	Remove						
78b(1)	Stage II						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
78b(2)	Stage III						INITIALS
78b(3)	Stage IV						
79	RACEWAY GROMMETS STAGE III TR: TO 21-LG118A-2-17-12						
79a	Remove						
80	BATTERY VENT KIT TR: TO 21-LG118A-2-17-42						
80a	Install stage IV						
80b	Remove stage IV						
81	ORDNANCE TRANSMISSION ASSEMBLY (OTA) TR: TO 21-LG118A-2-17-42						
81a	Install stage IV						
81b	Remove stage IV						
82	IFSS/FTOS ACCESS DOOR TR: TOs 21-LG118A-2-17-42, 21-LG118A-2-17-32						
82a	Install stage IV						
82b	Remove stage IV						
83	INSTRUMENTATION AND FLIGHT SAFETY SYSTEM (IFSS) CABLE HARNESS TR: TO 21-LG118A-2-17-42						
83a	Analyze malfunctions						
83b	Certify system serviceability						
83c	Install stage IV						
83d	Remove stage IV						
84	FUEL LINE SEVERANCE ASSEMBLY TR: TO 21-LG118A-2-17-42						
84a	Install stage IV						
84b	Remove stage IV						
85	INSTRUMENTATION AND FLIGHT SAFETY SYSTEM (IFSS) A/D SW TR: TO 21-LG118A-2-17-42, 33D9-89-23-1						
85a	Functional test						
85b	Install stage IV						
85c	Remove stage IV						
86	CHECKOUT OF THE FTOS CIRCUITS (STS/LVCTS) STAGE IV TR: TOs 21-LG118A-2-17-42, 33D9-89-26-1, 33D9-89-23-1						
87	PERFORM CHECKOUT OF THE FTOS COMPONENTS (STS) STAGE IV TR: TOs 21-LG118A-2-17-42, 33D9-89-23-1						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
88	ANTENNA PROVISION PANELS TR: TO 21-LG118A-2-17-42						INITIALS
88a	Install stage IV						
88b	Remove stage IV						
89	COMMAND ANTENNA TR: 21-LG118A-2-17-42						
89a	Install stage IV						
89b	Remove stage IV						
90	LIGHTNING SUPPRESSOR ASSEMBLY (LSA) AND COMMAND COUPLER TR: TO 21-LG118A-2-17-42						
90a	Install stage IV						
90b	Remove stage IV						
91	COMMAND ANTENNA SYSTEM RF CABLES TR: TO 21-LG118A-2-17-42						
91a	Install stage IV						
91b	Remove stage IV						
92	PERFORM UHF COMMAND ANTENNA CHECKOUT STAGE IV TR: TOs 21-LG118A-2-17-42, 33D9-89-26-1						
93	PERFORM INSTRUMENTATION FLIGHT SAFETY SYSTEM (IFSS) CHECKOUT (ECTS) STAGE IV TR: TOs 21-LG118A-2-17-42, 21-LG118A-2-51						
94	OPERATE TILT HANDLES STAGE IV TR: TO 21-LG118A-2-17-42						
95	FTOS/IFSS AVE COMPONENTS TR: TOs 21-LG118A-2-17-42, 11A15-1-427-1						
95a	Unpack/Inspect						
95b	Packing						
95c	Transport						
96	PERFORM STAGE TLCS/IFSS CHECKOUT (LF) TR: TOs 21-LG118A-2-17-32, 21-LG118A-2-51						
96a	Stage II to I						
96b	Stage III to I						
96c	Stage IV to I						
96d	RS to I						
97	PERFORM STAGE FTOS CIRCUIT CONTINUITY CHECKS (LVCTS) (LF) TR: TO 21-LG118A-2-17-32						
97a	Stage II to I						
97b	Stage III to I						

TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
Stage IV to I						INITIALS
PERFORM IFSS CABLE CONTINUITY CHECK (LF) RS / STAGE						
PRESSURE SWITCH (PS)(LF)						
Connect stage IV						
Disconnect stage IV						
RS/STAGE IV IFSS CABLE THRU STAGE IV IFSS/FTOS ACCESS DOOR (LF) TR: TO 21-LG118A-2-17-32						
Connect RS /Stage IV						
Disconnect RS/Stage IV						
RS/STAGE IV IFSS CABLE THRU MGCS ACCESS DOOR (LF) TR: TO 21-LG118A-2-17-32						
Connect RS /Stage IV						
Disconnect RS/Stage IV						
MGCS IFSS ELECTRICAL CABLES (LF) TR: TO 21-LG118A-2-17-32						
Connect Stage IV						
Disconnect Stage IV						
TEST LAUNCH CABLE SET (TLCS) CLAMPS (LF) TR: TO 21-LG118A-2-17-32						
Install Stage III						
Remove Stage III						
RE-ESTABLISH GROUND STAGES I, II, III TR: TO 21-LG118A-2-17-12						
REPOSITION FLIGHT CONTROL ORDNANCE CABLES STAGE III TR: TO 21-LG118A-2-17-12						
PERFORM MISSILE SAFETY CHECK TR: TO 21M-LGM30F-2-17-5						
"F" minuteman II missile						
"G" minuteman III missile						
PERFORM MISSILE RECEIPT INSPECTION TR: TO 21M-LGM30F-2-17-5						
"F" minuteman II missile	_					
"G" minuteman III missile						
RACEWAY COVERS TR: To 21M-LGM30F-2-17-5						
Install						
"F" minuteman II missile						
	Stage IV to I PERFORM IFSS CABLE CONTINUITY CHECK (LF) RS / STAGE IV TR: TOS 21-LG118A-2-17-32 PRESSURE SWITCH (PS)(LF) TR: TO 21-LG118A-2-17-32 Connect stage IV Disconnect stage IV RS/STAGE IV IFSS CABLE THRU STAGE IV IFSS/FTOS ACCESS DOOR (LF) TR: TO 21-LG118A-2-17-32 Connect RS /Stage IV Disconnect RS/Stage IV Disconnect Stage IV TEST LAUNCH CABLE SET (TLCS) CLAMPS (LF) TR: TO 21-LG118A-2-17-32 Install Stage III RE-ESTABLISH GROUND STAGES I, II, III TR: TO 21-LG118A-2-17-12 PERFORM MISSILE SAFETY CHECK TR: TO 21M-LGM30F-2-17-5 "F" minuteman III missile "G" minuteman III missile RACEWAY COVERS TR: To 21M-LGM30F-2-17-5 Install	Stage IV to I PERFORM IFSS CABLE CONTINUITY CHECK (LF) RS / STAGE IV TR: TOs 21-LG118A-2-17-32 PRESSURE SWITCH (PS)(LF) TR: TO 21-LG118A-2-17-32 Connect stage IV Disconnect stage IV Disconnect RS/Stage IV Disconnect Stage IV Disconnect RS/Stage IV Disconnec	Stage IV to I PERFORM IFSS CABLE CONTINUITY CHECK (LF) RS / STAGE IV TR: TOS 21-LG118A-2-17-32 PRESSURE SWITCH (PS)(LF) TR: TO 21-LG118A-2-17-32 Connect stage IV Disconnect stage IV Disconnect RS/Stage IV Disconnect Stage IV TEST LAUNCH CABLE SET (TLCS) CLAMPS (LF) TR: TO 21-LG118A-2-17-32 Install Stage III RE-ESTABLISH GROUND STAGES I, II, III TR: TO 21-LG118A-2-17-12 PERFORM MISSILE SAFETY CHECK TR: TO 21-LG118A-2-17-15 "F" minuteman II missile PERFORM MISSILE RECEIPT INSPECTION TR: TO 21M-LGM30F-2-17-5 "F" minuteman III missile PERFORM MISSILE RECEIPT INSPECTION TR: TO 21M-LGM30F-2-17-5 "F" minuteman III missile "G" minuteman III missile	Stage IV to I PERFORM IFSS CABLE CONTINUITY CHECK (LF) RS / STAGE IV TR: TOS 21-LG118A-2-17-32 PRESSURE SWITCH (PS)(LF) TR: TO 21-LG118A-2-17-32 Connect stage IV Disconnect stage IV RS/STAGE IV IFSS CABLE THRU STAGE IV IFSS/FTOS ACCESS DOOR (LF) TR: TO 21-LG118A-2-17-32 Connect RS /Stage IV Disconnect RS/Stage IV PSS CABLE THRU MGCS ACCESS DOOR (LF) TR: TO 21-LG118A-2-17-32 Connect RS /Stage IV Disconnect RS/Stage IV Disconnect RS/Stage IV MGCS IFSS ELECTRICAL CABLES (LF) TR: TO 21-LG118A-2-17-32 Connect Stage IV Disconnect Stage IV Disconnect Stage IV REST LAUNCH CABLE SET (TLCS) CLAMPS (LF) TR: TO 21-LG118A-2-17-32 Install Stage III Remove Stage III Remove Stage III RE-ESTABLISH GROUND STAGES I, II, III TR: TO 21-LG118A-2-17-12 PERFORM MISSILE SAFETY CHECK TR: TO 21M-LG118A-2-17-5 "F" minuteman III missile PERFORM MISSILE RECEIPT INSPECTION TR: TO 21M-LGM30F-2-17-5 "F" minuteman III missile PERFORM MISSILE RECEIPT INSPECTION TR: TO 21M-LGM30F-2-17-5 "F" minuteman III missile PERFORM MISSILE RECEIPT INSPECTION TR: TO 21M-LGM30F-2-17-5	Stage IV to I PERFORM IFSS CABLE CONTINUITY CHECK (LF) RS / STAGE IV TR: TOS 21-LG118A-2-17-32 PRESSURE SWITCH (PS)(LF) TR: TO 21-LG118A-2-17-32 Connect stage IV Disconnect stage IV Disconnect RS/Stage IV Disconnect RS/Stage IV Disconnect RS/Stage IV PRS/STAGE IV IFSS CABLE THRU STAGE IV IFSS/FTOS ACCESS DOOR (LF) TR: TO 21-LG118A-2-17-32 Connect RS/Stage IV Disconnect RS/Stage IV Disconnect RS/Stage IV Disconnect RS/Stage IV Disconnect RS/Stage IV MGCS IFSS ELECTRICAL CABLES (LF) TR: TO 21-LG118A-2-17-32 Connect Stage IV Disconnect Stage IV MGCS IFSS ELECTRICAL CABLES (LF) TR: TO 21-LG118A-2-17-32 Install Stage III RE-ESTABLISH GROUND STAGES I, II, III TR: TO 21-LG118A-2-17-12 REPOSITION FLIGHT CONTROL ORDNANCE CABLES STAGE III TR: TO 21-LG118A-2-17-5 "F" minuteman II missile "G" minuteman III missile	Stage IV to I PERFORM IFSS CABLE CONTINUITY CHECK (LF) RS / STAGE IV TR: TOS 21-LG118A-2-17-32 PRESSURE SWITCH (PS)(LF) TR: TO 21-LG118A-2-17-32 Connect stage IV Disconnect stage IV Disconnect RS/Stage IV Disconnect Stage IV Disconnect Stage IV TE: TO 21-LG118A-2-17-32 Connect Stage IV TEST LAUNCH CABLE SET (TLCS) CLAMPS (LF) TE: TO 21-LG118A-2-17-32 Install Stage III Remove Stage III Remove Stage III Remove Stage III Remove Stage III RE-ESTABLISH GROUND STAGES I, II, III TR: TO 21-LG118A-2-17-12 REPOSITION FLIGHT CONTROL ORDNANCE CABLES STAGE III TI: TO 21-LG118A-2-17-15 "F" minuteman II missile "G" minuteman II missile "G" minuteman III missile

ITEM#	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
108a(2)	"G" minuteman III missile						INITIALS
108b	Remove						
108b(1)	"F" minuteman II missile						
108b(2)	"G" minuteman III missile						
109	VERTICAL RESTRAINT BANDS TR: TO 21M-LGM30F-2-17-5						
109a	Install						
109a(1)	"F" minuteman II missile						
109a(2)	"G" minuteman III missile						
109b	Remove						
109b(1)	"F" minuteman II missile						
109b(2)	"G" minuteman III missile						
110	NOZZLE SHIPPING LINKS TR: TO 21M-LGM30F-2-17-5						
110a	Install						
110b	Remove						
111	WORK PLATFORM TR: TO 21M-LGM30F-2-17-5						
111a	Install						
111a(1)	"F" minuteman II missile						
111a(2)	"G" minuteman III missile						
111b	Remove						
111b(1)	"F" minuteman II missile						
111b(2)	"G" minuteman III missile						
112	PERFORM HAZARDOUS CURRENT CHECK TR: TO 21M-LGM30F-2-17-5						
113	DESTRUCT ASSEMBLIES TR: TO 21M-LGM30F-2-17-5, 11A15-1-167-1						
113a	Install						
113a(1)	Install destruct assemblies "F" Minuteman II missile						
113a(2)	Install destruct assemblies "G" Minuteman III missile						
113b	Remove						
113b(1)	Remove destruct assemblies "F" Minuteman II missile						
113b(2)	Remove destruct assemblies "G" Minuteman III missile						
113c	Inadvertent separation destruct system						
113c(1)	Install components						
113c(2)	Remove components						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
114	BASE ADAPTER RING MODIFICATION KIT TR: TO 21M-LGM30F-2-17-5						INITIALS
114a	Install						
114b	Remove						
115	OPERATIONAL MISSILE SUPPORT ADAPTER RING TR: TO 21M-LGM30F-2-17-5						
115a	Install						
115b	Remove						
116	MODIFIED MISSILE SUPPORT ADAPTER RING TR: TO 21M-LGM30F-2-17-5						
116a	Install						
116b	Remove						
117	COMMAND DESTRUCT SAFE/ARM DEVICE "F" Minuteman II missile TR: TOs 21M-LGM30F-2-17-5, 11A15-1-167-1, 33D9-108-11-1						
117a	Install						
117b	Remove						
117c	Checkout						
118	PREMATURE STAGE SEPARATION SAFE ARM DEVICE TR: TOs 21M-LGM30F-2-17-5, 11A15-1-167-1, 33D9-108-11-1						
118a	Install						
118a(1)	F Minuteman II missile						
118a(2)	G Minuteman III missile						
118b	Remove						
118b(1)	F Minuteman II missile						
118b(2)	G Minuteman III missile						
118c	Checkout						
119	PREMATURE STAGE SEPARATION BATTERIES AT THE MPF TR: TO 21M-LGM30F-2-17-5, 11A15-1-167-1						
119a	Install						
119a(1)	"F" minuteman II missile						
119a(2)	"G" minuteman III missile						
119b	Remove						
119b(1)	"F" minuteman II missile						
119b(2)	"G" minuteman III missile						
119c	Checkout						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL
120	PREMATURE STAGE SEPARATION BATTERIES AT THE LF TR: 21M-LGM30F-2-17-5						INITIALS
120a	Install						
120a(1)	"F" minuteman II missile						
120a(2)	"G" minuteman III missile						
120b	Remove						
120b(1)	"F" minuteman II missile						
120b(2)	"G" minuteman III missile						
121	PREMATURE STAGE SEPARATION TIMERS AT THE MPF TR: TO 21M-LGM30F-2-17-5						
121a	Install						
121a(1)	"F" minuteman II missile						
121a(2)	"G" minuteman III missile						
121b	Remove						
121b(1)	"F" minuteman II missile						
121b(2)	"G" minuteman III missile						
121c	Checkout						
122	PREMATURE STAGE SEPARATION TIMERS AT THE LF TR: TO 21M-LGM30F-2-17-5						
122a	Install						
122a(1)	"F" minuteman II missile						
122a(2)	"G" minuteman III missile						
122b	Remove						
122b(1)	"F" minuteman II missile						
122b(2)	"G" minuteman III missile						
123	CHECKOUT MISSILE OPERATIONAL PRESSURE TRANSDUCERS TR: TO 21M-LGM30F-2-17-5						
123a	"F" minuteman II missile						
123b	"G" minuteman III missile						
124	PERFORM ELECTRICAL BONDING CHECKS TR: TO 21M-LGM30F-2-17-5						
124a	"F" minuteman II missile						
124b	"G" minuteman III missile						
125	PERFORM FAULT ISOLATION/CONTINUITY CHECKOUT OF LSS CABLE TR: TO 21M-LGM30F-2-17-5						
125a	"F" minuteman II missile						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
125b	"G" minuteman III missile						INTIALO
126	MOD 8 LSS CABLE						
	TR: TO 21M-LGM30F-2-17-5						
126a	Install "F" minuteman II missile						
126b	Remove "F" minuteman II missile						
127	ALIGN NCU UMBILICAL CLAMP TR: TO 21M-LGM30F-2-17-5						
128	PERFORM CONTINUITY CHECK OF J745 TR: TO 21M-LGM30F-2-17-5						
128a	"F" minuteman II missile						
128b	"G" minuteman III missile						
129	MOD 7 LSS CABLE TR: TO 21M-LGM30F-2-17-5						
129a	Install "G" minuteman III missile						
129b	Remove "G" minuteman III missile						
130	CHECKOUT PREMATURE STAGE SEPARATION SAFE/ARM ACTUATOR "G" MM III TR: TO 21M-LGM30F-2-17-5						
131	PREMATURE STAGE SEPARATION INERTIA SWITCH TR: TO 21M-LGM30F-2-17-5						
131a	Install "G" minuteman III missile						
131b	Remove "G" minuteman III missile						
131c	Checkout "G" minuteman III missile						
132	SIGNAL CONDITIONER TR: TO 21M-LGM30F-2-17-5						
132a	Install "G" minuteman III missile						
132b	Remove "G" minuteman III missile						
132c	Checkout "G" minuteman III missile						
133	PERFORM PSRE SAFETY CHECK TR: TO 21M-LGM30F-2-17-5						
134	PERFORM PSRE RECEIPT INSPECTION TR: TO 21M-LGM30F-2-17-5						
135	PSRE THERMAL INSULATION BLANKET AND BRACKETS TR: TO 21M-LGM30F-2-17-5						
135a	Install						
135b	Remove						
136	PSRE DESTRUCT ASSEMBLIES TR: TO 21M-LGM30F-2-17-5						
136a	Install						
136b	Remove						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
137	PSRE INSTRUMENTATION CABLE TR: TO 21M-LGM30F-2-17-5						
137a	Install						
137b	Remove						
137c	Fault isolation/continuity checkout						
138	PSRE COMMAND DESTRUCT SAFE/ARM DEVICE TR: TO 21M-LGM30F-2-17-5, 33D9-108-11-1, 11A15-1-167-1						
138a	Install						
138b	Remove						
138c	Checkout						
139	PSRE SE339A/HRU-1126/A CABLE TR: TO 21M-LGM30F-2-17-5						
139a	Install						
139b	Remove						
139c	Checkout fault isolation/continuity						
140	PERFORM PSRE HAZARDOUS CURRENT CHECK TR: TO 21M-LGM30F-2-17-5						
141	PERFORM PSRE ELECTRICAL BONDING CHECKS TR: TO 21M-LGM30F-2-17-5						
142	CHECKOUT OF PSRE OPERATIONAL PRESSURE TRANSDUCERS TR: TO 21M-LGM30F-2-17-5						
143	TRANSPORT/HANDLE ALL ORDNANCE TR: TO 21M-LGM30F-2-17-5, 11A15-1-167-1, AFI 91-201						
144	BALLISTIC END CLAMP TR: TO 33D9-68-30-1						
144a	Inspect						
144b	Proofload						
145	NCU CABLE ASSEMBLY HOIST CLAMP TR: TO 33D9-68-30-1						
145a	Inspect						
145b	Proofload						
146	LOCK REMOVAL ROD TR: TO 33D9-68-30-1						
146a	Inspect						
146b	Proofload						
147	FOUR-PERSON WORK BASKET TR: TO 33D9-68-30-1						
147a	Inspect						
147b	Proofload						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
148	TWO-PERSON WORK BASKET TR: TO 33D9-68-30-1						INITIALS
148a	Inspect						
148b	Proofload						
149	WORK PLATFORM TR: TO 33D9-68-30-1						
149a	Inspect						
149b	Proofload						
150	BARREL SLING TR: TO 33D9-68-30-1						
150a	Inspect						
150b	Proofload						
151	STABILIZER CHAIN ASSEMBLY TR: TO 33D9-68-30-1						
151a	Inspect						
151b	Proofload						
152	SIMULATOR WORK CAGE TR: TO 33D9-68-30-1						
152a	Inspect						
152b	Proofload						
153	STAGE IV/RS/LEGG/LSA EMPLACEMENT CONTAINER PHYSICAL SECURITY SYSTEM TR: TOs 35E20-2-38-1, 21-LG118A-6WC-3						
153a	Inspect						
153b	Operational checkout						
153c	Troubleshoot						
153d	Repair						
154	STAGE II/III & IV EMPLACEMENT CONTAINER APU/ECS PACKAGE TR: TO 35M1-10-2-1, 35E20-2-38-1, 35C2-3-475-2, 35C2-3-479-1, 35C2-3-480-1, 21-LG118A-6WC-3						
154a	Inspect/service						
154b	Operational checkout						
154c	Troubleshoot						
154d	Repair						
155	MJ1-1 DIESEL HYDRAULIC TEST STAND DIESEL ENGINE TR: TOs 33A2-2-21-31, 33A2-2-1-146WC-1, 33A3-3-1-166WC-2						
155a	Inspect/service						
155b	Operational checkout						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
155c	Troubleshoot						
155d	Repair						
156	ELECTRIC MOTOR DRIVEN HYDRAULIC TEST STAND (HIP-E-1) TR: TOs 33A2-2-87-1, 21M-LGM30G-2-18						
156a	Inspect						
156b	Service						
156c	Preoperational Checkout						
156d	Repair						
156e	Operate						

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TASK#	TASK / KNOWLEDGE ITEM	TASK	START DATE	COMP DATE	INITIALS	TRAINER INITIALS	CERTIFYING OFFICAL INITIALS
1	MAINTENANCE CONTROLLER COMMON TASKS						IIIIIIAEO
	TR: AFSPCI 21-0108, EWR 127-1, Local directives and operating instructions						
1a	Support						
1a(1)	Program/readiness reviews						
1a(2)	Problem resolutions/troubleshooting						
1b	Perform						
1b(1)	Post launch actions						
1b(2)	Launch day activities						
1b(3)	Walk-down procedures						
1b(4)	Disaster recovery operations						
1b(5)	Data reviews/procedure closeout						
1c	Ensure compliance with						
1c(1)	Procedures						
1c(2)	Local safety plans						
1c(3)	Test Configuration control						
1c(4)	Emergency procedures						
1c(5)	Local security requirements						
1c(6)	Environmental requirements						
1d	Conduct briefing/debriefings						
1e	Review/approve procedures						
1f	Operate communication systems						
2	UNDERSTAND FUNCTION AND OPERATION OF THE						
2	FOLLOWING ATLAS SUBSYSTEMS						
2a	TR: Procedures and training materials Airframe						
2a(1)	Centaur						
2a(1)	Booster						
2a(2)	Interstage						
2a(3) 2a(4)	Solid Rocket Motor (SRM)						
	, , ,						
2b	Ordnance						
2c	Propulsion						
2c(1)	Atlas engines						
2c(2)	Centaur engine						
2c(3)	Propellant tank						

TASK#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICAL INITIALS
2c(4)	Solid rocket booster						
2c(5)	Roll control module/reaction control						
2d	Payload fairing and adapters						
3	UNDERSTAND FUNCTION AND OPERATION OF THE FOLLOWING DELTA SUBSYSTEMS TR: Procedures and training materials						
3a	Payload fairing and adapters						
3b	First, second, third and interstage						
3b(1)	Airframe						
3b(2)	Ordnance						
3b(3)	Hydraulics						
3b(4)	Liquid propulsion						
3b(5)	Nutation Control System						
3b(6)	Graphite Epoxy Motor (GEM)						
3c	Monitor, evaluate and report on the following fairing procedures						
3c(1)	Finaling						
3c(2)	Unloading						
3c(3)	Erection and mating						
3d	Monitor, evaluate and report on the following payload procedures						
3d(1)	Erection						
3d(2)	Erection preparation						
3d(3)	Mating and separation clamp installation						
3e	Monitor, evaluate and report on the following hydraulic procedures						
3e(1)	Pre-test preparations						
3e(2)	Second stage hydraulic checks						
3e(3)	First stage hydraulic system preparation						
3e(4)	Launch mount/hydraulic system qualifications						
3f	Monitor, evaluate and report on the following interstage procedures						
3f(1)	Erection and Mate						
3f(2)	Handling and checkout						
3g	Monitor, evaluate and report on the following first stage procedures						
3g(1)	Weigh						

TASK#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICAL INITIALS
3g(2)	Off-load						INTIALO
3g(3)	Erection						
3g(4)	Engine preparations						
3g(5)	Receiving and storage						
3g(6)	Propulsion qualifications						
3g(7)	Propulsion pad qualification						
3g(8)	Propulsion system checkout						
3g(9)	Liquid Oxygen (LOX) leak checks						
3g(10)	Fuel system qualification and leak checks						
3g(11)	Pre-Vehicle On Stand (VOS) mechanical preparations						
3h	Monitor, evaluate and report on the following third stage procedures						
3h(1)	Third stage weigh						
3h(2)	Spin table processing						
3h(3)	Payload attach fitting processing						
3i	Monitor, evaluate and report on the following solid motors procedures						
3i(1)	Off-load						
3i(2)	Alignment						
3i(3)	Receiving						
3i(4)	Interface assembly						
3i(5)	Erection and mating						
3i(6)	Checkout and buildup						
3i(7)	Handling and transfer						
3i(8)	Aft fairing, cork case and forward fairing installation						
3i(9)	Graphite Epoxy Motor (GEM) nose cone installation and transportation						
3j	Monitor, evaluate and report on the following Second Stage procedures						
3j(1)	Weigh						
3j(2)	Off-load						
3j(3)	Servicing						
3j(4)	Erection and mate						
3j(5)	Receiving inspection						
3j(6)	Countdown preparations						

TASK#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP	TRAINEE	TRAINER INITIALS	CERTIFYING OFFICAL INITIALS
3j(7)	Mechanical preparations						
3j(8)	Pneumatic system qualification						
3j(9)	Pre-Vehicle On Stand (VOS) and erection preparation						
3k	Monitor, evaluate and report on the following third stage payload assist motor (PAM) procedures						
3k(1)	Processing						
3k(2)	Spin table mating						
3k(3)	Stage spin balance						
3k(4)	Ordnance installation						
3k(5)	Stage build-up and weighing						
4	UNDERSTAND FUNCTION, OPERATION AND PROCESSING OF THE FOLLOWING TITAN SUBSYSTEMS TR: Procedures and training materials						
4a	Core vehicle						
4a(1)	Airframe						
4a(2)	Hydraulics						
4a(3)	Liquid rocket engines						
4b	Payload fairings						
4c	Ordnance system						
4d	Centaur upper stage						
4d(1)	Airframe						
4d(2)	Hydraulics						
4d(3)	Propulsion						
4d(4)	Propellant transfer system						
4e	Inertial Upper Stage (IUS)						
4e(1)	Airframe						
4e(2)	Propulsion						
4e(3)	Thermal control						
4e(4)	Shuttle airborne support equipment						
4f	Solid Rocket Motor Upgrade (SRMU)						
4g	Propellant transfer and pressurization system						
4g(1)	Fuel holding area/propellant loading unit						
4g(2)	Oxidizer holding area/propellant loading unit						

TASK#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICAL INITIALS
5	UNDERSTAND FUNCTION AND OPERATION OF THE FOLLOWING SPACECRAFT SUBSYSTEMS TR: Procedures and training materials						
5a	Airframe						
5b	Ordnance						
5c	Propulsion						
5d	Solar array						
5e	Thermal control						
5f	Flight termination						

ITEM#	TASK / KNOWLEDGE ITEM	CORE TASK	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
1	PEACEKEEPER ROLL TRANSFER PROCEDURES TR: TO 21-LG118A-2-26						INITIALS
1a	Position and stabilize solid stage transporter						
1b	Roll transfer Peacekeeper 1st, 2nd, and 3rd stage motors into solid stage transporter using solid stage transporter winch system						
1c	Conduct Peacekeeper 1st, 2nd, and 3rd stage motor to solid stage transporter and tiedown procedures						
1d	Position and stabilize type II transporter						
1e	Pneumatic Control Cart						
1e(1)	Inspect						
1e(2)	Service						
1e(3)	Operate						
1f	Conduct Peacekeeper 1st, 2nd, and 3rd stage motor to Type II tiedown procedures						
1g	Roll transfer Peacekeeper 1st, 2nd, and 3rd stage motors in and out of Type II transporter using pneumatic control cart and transport and handling end rings						
1h	Roll transfer 1st, 2nd, and 3rd stage motors into building using building winch system and processing rings						
2	PEACEKEEPER END RING CHANGE OUT PROCEDURES TR: TO 21-LG118A-2-26						
2a	Remove/Install transport and handling rings						
2b	Remove/Install processing rings						
3	PERFORM MISSILE TRANSFER AND TIEDOWN PROCEDURES TR: TOs 21M-LGM30B-2-26, 21M-LGM30F-3-3, 21M-LGM30B-2-2, 35A2-5-25-1, 36A-2-14-2, 21M-LGM30B-2-25						
3a	Operational carriages						
3b	Storage carriages						
4	ROCKET MOTOR TRAILER (RMT) TRANSPORT TIEDOWN PROCEDURES TR: TOs 21M-LGM30B-2-26, 36A9-11-3-31, 36A9-11-3-21, 35A-4-2-41-1, 2K-SR-55-3, 2K-SR-56-3, 2K-SR-73-3, 2K-SR-57-3, 21M-LGM30B-2-25, 35AR-2-41-1; AFI 91-409; OGDEN AFMC 136-2						
4a	Perform tractor/trailer suspension operation procedures						
4b	Conduct RMT environmental control operation procedures						
4c	Perform RMT leveling procedures						
4d	Conduct procedures to transport to and download at disposal area						
4e	Perform operational carriage handling and tiedown procedures						
4f	Conduct end ring and bogie wheels 1st stage handling and tiedown procedures						

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
4g	Perform research and development carriage handling and tiedown procedures						INITIALS
4h	Perform universal carriage handling and tiedown procedures						
4i	Perform storage carriage tiedown procedures						
4 j	Perform end ring tiedown procedures for LGM30F & G 2nd and 3rd stages						
4k	Conduct visual rocket motor inspection for shipping and receiving						
5	MINUTEMAN MISSILE CARRIAGE CHANGE TR: TO 21M-LGM30B-2-26						
5a	Perform carriage inspection procedures						
5a(1)	Operational						
5a(2)	Storage						
5b	Perform carriage change out procedures						
6	PERFORM M-BAR REMOVAL/INSTALLATION PROCEDURES TR: TO 21M-LGM30F-2-26						
7	MOTOR HORIZONTAL AND VERTICAL RESTRAINT PROCEDURES TR: TOs 21M-LGM30B-2-26, 2K-SRM57-3, 2K-SRM56-3, 2K-SR55-3, 2K-SR19-3, 2K-SR73-2						
7a	Perform 1st stage installation/removal procedures						
7b	Perform LGM30B, F, & G 2nd stage installation/removal procedures						
7c	Perform LGM30B, F, & G 3rd stage installation/removal procedures						
8	HOISTING PROCEDURES TR: TOs 21M-LGM30B-2-26, 2K-SRM55-3, 2K-SRM56-3, 2K-SRM57-3, 2K-SR19-3, 2K-SR73-3: AFI 91-409						
8a	Perform 1st stage lifting I-beam procedures						
8b	Perform 1st stage nylon straps/spreader bar procedures						
8c	Perform 1st stage cable lifting sling (fired case) procedures						
8d	Perform 2nd stage lifting I-beam procedures						
8e	Perform 2nd stage nylon straps with spreader bar procedures	1					
8f	Perform 3rd stage H-frame sling procedures	+					
8g	Perform 3rd stage adjustable cable assembly procedures						
8h	Perform LGM30G 3rd stage lifting I-beam procedures	1					
8i	Perform missile booster sling procedures						
8j	Perform operation of facility hoist (10 Ton and 50 Ton)	1					
9	REMOVE AND INSTALL FREON COLLECTION TANK TR: TO 21M-LGM30F-2-26; Test Directive; AFMC Form 206						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
10	STATIC FIRING FACILITY PROCEDURES TR: TOs 22D9-144-5-1, 2K-SRM55-2-11, 2K-SRM56-3, 2K-SRM56-11, 2K-SRM57-3, 2K-SRM57-11, 33D9-114-5-1; Test Directives; AFMC Form 206						INITIALS
10a	Perform universal test fixture stand installation and alignment						
10b	Perform rocket motor installation/removal for all stages						
10c	Perform rocket motor alignment procedures						
10d	Perform roller adjustment (universal test fixture)						
10e	Perform transit function/operation						
10f	Perform small component and motor firing						
11	PERFORM OPERATIONAL PRESSURE TRANSDUCER INSTALLATION FOR LGM30B/F/G 1st & 2nd STAGE AND LGM30A/B/F/G 3rd STAGE TR: TOs 21M-LGM30B-2-26, 2K-SRM53-3, 2K-SRM55-11, 2K-SR19-11, 2K-SR73-3; Test Directive						
12	PROOFLOAD FACILITY TR: TO 21M-LGM30F-1-17						
12a	Perform proofload of						
12a(1)	Minuteman operational carriages						
12a(2)	Missile booster sling						
12a(3)	Facility crane (10 Ton and 50 Ton)						
12a(4)	Tower assembly proofload system						
12a(5)	Minuteman missile suspension proofload kit						
12a(6)	Slings						
12b	Hydraulic power unit						
12b(1)	Inspect						
12b(2)	Service						
12b(3)	Operate						
13	SUPERVISION						
13a	Analyze and resolve irregular occurrences during						
13a(1)	Minuteman missile and rocket motor roll transfer procedures TR: TOs 21M-LGM30B-2-26, 21M-LGM30F-3-3, 21M-LGM30B-2-2, 35A2-5-25-1, 36A-2-14-2, 21M-LGM30B-2-25						
13a(2)	Carriage change operations TR: 21M-LGM30B-2-26						

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
13b	Certify configuration of Minuteman missile and rocket motors for shipment TR: TOs 21M-LGM30B-2-26, 36A9-11-3-31, 36A9-11-3-21, 35A-4-2-41-1, 2K-SR-55-3, 2K-SR-56-3, 2K-SR-73-3, 2K-SR-57-3, 21M-LGM30B-2-25, 35AR-2-41-1;						
	AFI 91-409; OGDEN AFMC 136-2						
13c	Support outside agencies during engineering of new and modified workloads TR: TOs 21M-LGM30B-2-26, 21-LG118A-2-26, 21M-AGM86-1-1						
13d	Supervise personnel during						
13d(1)	Minuteman missile and rocket motor transfer TR: TOs 21M-LGM30B-2-26, 21M-LGM30F-3-3, 21M-LGM30B-2-2, 35A2-5-25-1, 36A-2-14-2, 21M-LGM30B-2-25						
13d(2)	Carriage change operations TR: 21M-LGM30B-2-26						
13e	Assess workload and personnel requirements to plan weekly work schedules						

AFSC 2M0X2 STS **ATTACHMENT 7** AF RESEARCH LABORATORY TASKS

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
	All tasks performed are coordinated through local agencies with the technicians signing off on the coordination page. This will serve as task qualification documentation and the following tasks are generic in nature due to the Research and Development mission. (i.e. Safety, Bioenvironmental, Security,						
1	Laboratory/Developmental Engineers, etc.) COMPLY WITH EXPLOSIVE SAFETY PROCEDURES						
	TR: AFIs 91-202, 91-201; TOs 11A-1-46, 11A-1-42, 11A-1-66						
1a	Laboratory/range safety						
1b	Transportation						
1c	Initiators (EBWS/CAPS)						
1d	Storage						
2	Electronic Cables TR: TO 00-25-234						
2a	Fabricate						
2b	Repair						
3	<i>Transducers</i> TR: TOs 31-1-141-143, 31-1-141-3						
3a	Describe theory of operation						
3b	Install						
3c	Remove						
3d	Calibrate						
4	Closed Circuit Video (CCV) Systems TR: TO 31-1-141-9						
4a	Describe theory of operation						
4b	Operate:						
4b(1)	Cameras						
4b(2)	Monitors						
4b(3)	Recorders						
4c	Maintain:						
4c(1)	Cameras						
4c(2)	Monitors						
4c(3)	Recorders						
5	LASERS TR: TO 31-1-141-3; AFOSH STD 161-10						
5a	Comply with standard safety practices						
5b	Describe theory of operation						
5c	Setup						
5d	Operate						

AFSC 2M0X2 STS **ATTACHMENT 7** AF RESEARCH LABORATORY TASKS

ITEM#	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
6	HIGH ENERGY MICROWAVE SYSTEMS TR: TO 31-1-141-11						INITIALS
6a	Comply with standard safety practices						
6b	Describe theory of operation						
6c	Set-up						
6d	Operate						
7	OPTICS TR: TO 33B-8-9-1						
7a	Describe theory of operation						
7b	Clean						
7c	Align						
7d	Handle						
8	PROPELLANTS TR: AFIS 91-201, 91-202; AFMAN 161-30 VOL 2						
8a	Solid propellant						
8a(1)	Comply with standard safety practices						
8a(2)	Handle						
8a(3)	Store						
8a(4)	Inspect spent cases						
8b	Liquid propellants						
8b(1)	Comply with standard safety practices						
8b(2)	Store/Handle						
8b(2a)	LOX/LN2						
8b(2b)	Hypergolics						
9	LIQUID/GAS/VACUUM SYSTEMS TR: TOs 00-25-233, 00-25-244, 1-1A-8, 33-1-19						
9a	Liquid systems						
9a(1)	Comply with standard safety practices						
9a(2)	Describe theory of operation						
9a(3)	Design						
9a(4)	Fabricate						
9a(5)	Install						
9a(6)	Operate						
9b	Gas systems						
9b(1)	Comply with standard safety practices						
9b(2)	Describe theory of operation						
9b(3)	Design						

AFSC 2M0X2 STS **ATTACHMENT 7** AF RESEARCH LABORATORY TASKS

ITEM #	TASK / KNOWLEDGE ITEM	CORE	START DATE	COMP DATE	TRAINEE INITIALS	TRAINER INITIALS	CERTIFYING OFFICIAL INITIALS
9b(4)	Fabricate						INTIALS
9b(5)	Install						
9b(6)	Operate						
9c	Vacuum systems						
9c(1)	Comply with standard safety practices						
9c(2)	Describe theory of operation						
9c(3)	Design						
9c(4)	Fabricate						
9c(5)	Install						
9c(6)	Operate						
10	RESEARCH AND DEVELOPMENT LABORATORY EQUIPMENT TR: TOs 33-1-19, 00-25-299						
10a	Vacuum pumps						
10a(1)	Inspect						
10a(2)	Operate						
10b	Ovens						
10b(1)	Inspect						
10b(2)	Operate						
10c	Chillers						
10c(1)	Inspect						
10c(2)	Operate						
11	Firing Console TR: Local Procedures						
11a	Setup						
11b	Operate						
11c	Shutdown						
11d	Emergency Shutdown						

PART II Section B - COURSE OBJECTIVE LISTING

There is currently no course objective list. This area is reserved.

Section C - SUPPORT MATERIALS

There are currently no support material requirements. This area is reserved.

PART II Section D - TRAINING COURSE INDEX

1. **Purpose.** This section of CFETP identifies training courses available in the Missile and Space Systems Maintenance specialty and shows how the courses are used by each MAJCOM in their career field training programs. Career field functional managers and training management personnel should use this information to plan, develop, and update their respective MAJCOM continuation training program.

2. Air Force In-Residence Courses

2.1. *3-Level Awarding Course*. Completion of the following course is mandatory for the award of the 3-skill level.

CRS NO./TITLE	MDS/EQUIP	<i>LOCATION</i>	<u>USER</u>
V3ABR2M032 000	ICBM	VANDENBERG	AFSPC
Missile and Space Systems			
Maintenance Apprentice			

2.2. Other In-Resident Courses.

CRS NO./TITLE	MDS/EQUIP	LOCATION	<u>USER</u>
ICBM-MITC ICBM Maintenance	ICBM	F E WARREN	AFSPC
Instructional Techniques Course ICBM-MEC ICBM Maintenance Evaluator Course	ICBM	F E WARREN	AFSPC

3. Extension Course Institute (ECI) Courses

CRS NO.	COURSE TITLE
CDC 2M052	Missile and Space Systems Maintenance Journeyman
CDC 2M072	Missile and Space Systems Maintenance Craftsman

PART II Section E - MAJCOM UNIQUE PROCEDURES

There are currently no MAJCOM unique requirements. This area is reserved.